P-02 Suicide attempt with Paraquat poisoning; Case report with autopsy images

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Paraquat (PQ) is one of the most widely used herbicides in the world and one of most famous herbicide for suicide intent. PQ intoxication is a serious public health problem not only in Japan but all over the world. In 1999, Japan banned the sale of PQ. Now, PQ is not be available for farm, but a large number of PQ is still sleeping in barn. Number of suicide cases with PQ is getting smaller and smaller, however, it has been reported. Physicians have to recognize the severity of PQ poisoning. In this case report, we aimed to present suicide attempt case with PQ poisoning with autopsy images.

75 years-old woman was taken to our hospital with PQ poisoning for suicide attempt. She took about 200mL of PQ, and vomited a half of it. At arrival to our emergency room, her conscious was drowsy. Lethal dosage of PQ is estimated 10 to 15 mL. The amount of PQ she took was over lethal dose, we decided to intubation and to perform gastric lavage. after several hours, she felt into circulatory failure. any vasopressor could not maintain her circulation, she was dead.

Her autopsy images revealed severe bilateral lung congestion, necrosis of convoluted tubule, necrosis of adrenal cortex and non-caseating granuloma of para-aortic lymph nodes. Sarcoidosis was sub-clinical and never affected her prognosis. The sever PQ poisoning brought multi-organ failure and death. We, physicians, never forget the severity of PQ poisoning.

P-03 New glucose-lowering drugs were favoured to prove non-inferior to placebo. An analysis of the nine mega-trials

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Background and aim: Since rosiglitazone was reported to increase cardiovascular risks, concerns about the cardiovascular safety of new antidiabetic agents have been raised. To evaluate the safety of a new antidiabetic agent to treat type 2 diabetes, the FDA has asked sponsors to demonstrate that the drug will not result in an unacceptable increase in cardiovascular risk. The aim of the present study was to investigate glycaemic controls in these trials.

Study Design: Descriptive study

Trials Studied: Trials of nine drugs (alogliptin, canagliflozin, empagliflozin, exenatide, liraglutide, lixisenatide, saxagliptin, semaglutide, and sitagliptin), all of which were performed in accordance with the FDA guidance and published as of 3 October 2017.

Measurements and analyses: Trial design, glucose control, and safety data.

Results: In all of the nine trials, use of open-label antihyperglycaemic agents was encouraged as required to achieve individually appropriate glycohaemoglobin (HbA1c) targets in all patients. This approach was taken to assess possible test drug-specific effects by minimizing potential confounding effects of differential glucose control. However, we have found that HbA1c was higher in the placebo group than in the test medicine group throughout the trial in all of the nine studies, even though the placebo group patients received more antihyperglycaemic agents than those in the test medicine group. Heart failure was significantly increased in the test drug group in the alogliptin and the saxagliptin trial. Amputation was significantly increased in the canagliflozin group compared with the placebo group.

Conclusion: The less-well-controlled HbA1c and more antihyperglycaemic agents used in the placebo group confound the treatment comparison and distort the interpretation of the results, misleading healthcare professionals.

P-04 Experience of using SGLT-2 inhibitor Ipragliflozin for type 2 diabetes.

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Introduction: SGLT2 inhibitor is an oral hypoglycemic drug that suppresses glucose reabsorption in the kidney and releases glucose from urine. We examined changes in HbA1c, liver function, lipid, blood pressure and body weight of type 2 diabetic patients in treatment with SGLT-2 inhibitor Ipragliflozin.

Method: The subjects were 10 type 2 diabetic patients (7 males and 3 females) with type 2 diabetes from ages 45 to 82. The mean age of 10 cases was 62.0 ± 11.6 years, the mean duration of diabetes was 8.9 ± 5.8 years, and the mean HbA1c was 9.1 ± 1.4%. Data was expressed as mean ± SD. Before and after administration of Ipragliflozin 50 mg for type 2 diabetes, changes in HbA1c, GOT, GPT, γ-GTP, TG, HDL-C, LDL-C, blood pressure and body weight were investigated.

Result: In the change before Ipragliflozin 50 mg treatment and one month after treatment, mean HbAc improved from 9.1% to 8.2%, which was a significant improvement in paired t-test ($p<0.05$). In the change before Ipragliflozin 50 mg treatment and one month after treatment, mean body weight decreased from 70.9 kg to 69.3 kg, which was a significant improvement in paired t-test ($p<0.05$). In the change before Ipragliflozin 50 mg treatment and one month after treatment, mean TG decreased from 150.2 mg/dL to 95.7 mg/dL, which was a significant improvement in paired t-test ($p<0.05$). In this study, there was no significant change in systolic blood pressure, diastolic blood pressure, GOT, GPT, γGTP, HDL and LDL.

Discussion: Administration of SGLT-2 inhibitor Ipragliflozin to patients with type 2 diabetes was expected to result in good glycemic control and weight loss. Since the number of cases is still small, it is necessary to further investigate further cases in the future.

Conclusion: Administration of SGLT-2 inhibitor Ipragliflozin to patients with type 2 diabetes was expected to result in good glycemic control and weight loss.

P-06 Group A streptococcal pneumonia in a COPD patient

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INTRODUCTION:

GAS pneumonia is an uncommon cause of community-acquired pneumonia. It is associated with underlying conditions, such as chronic lung disease. Transmission of GAS can occur within households. Progression is rapid, and the 30-day mortality rate is high.

CASE PRESENTATION:

An 80-year-old male patient with a history of chronic obstructive pulmonary disease and anorexia developed exertional dyspnea and a productive cough three days before hospital admission.

Symptoms did not improve and he developed a fever on the day of hospital admission. As his mental status deteriorated, he came to our hospital by ambulance. The patient's family history was notable in that his daughter and grandchild both had streptococcal pharyngitis. On examination, his mental state was scored as E4V4M6, temperature was 39.3℃, systolic blood pressure 70 mmHg, heart rate 110 beats per minute, respiratory rate 36 breaths per minute and oxygen saturation level 85% while breathing ambient air. On auscultation, there were pan-inspiratory crackles in both lungs. White blood cell count was 18090/μL, blood urea nitrogen was 45.5 mg/dL, serum creatinine was 2.36 mg/dL. Chest X-ray and computed tomography revealed hyperinflation and infiltrative shadows in both lungs. We started antimicrobials of meropenem and vancomycin as a treatment for sepsis with bacterial pneumonia. On the 6th hospital day, blood and sputum culture showed Streptococcus pyogenes (group A streptococcus, GAS). We diagnosed GAS pneumonia and invasive GAS infection. We changed antimicrobials to ampicillin 2 grams every 8 hours. The patient's respiratory condition gradually improved and on the 21st hospital day, he was discharged with good vital signs.

DISCUSSION:

A high index of suspicion for GAS pneumonia is based on history, such as contact with sick people and underlying disease. Rapid application of the most appropriate treatment is crucial.

P-07 A Case of Cytomegalovirus Associated Guillain-Barre Syndrome with Antiganglioside Antibodies Showing Demyelination by Serial Neurophysiological Studies

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Introduction

In cytomegalovirus (CMV) associated Guillain-Barre syndrome (GBS) (CMV-GBS), patients often developed severe sensory loss and facial nerve involvement. Our patient's clinical manifestations showed prolonged limb weakness in addition to previously reported symptoms with demyelination and progressive decrease in sensory nerve action potential (SNAP).

Case Presentation

We experienced a 54-year-old man with demyelinating form of CMV-GBS with IgM anti-GM1, anti-GM2 and anti-GalNAc-GD1a antibodies, whose serial neurophysiological studies revealed demyelination in motor nerves. He developed symmetrical limb dysesthesia and unsteady gait 10 days after diarrhea (day1). Neurological examination on admission of the 11th day revealed facial diplegia, symmetrical limb dysesthesia, hypesthesia and ataxia of both lower extremities, and hyporeflexia without limb weakness. The neurophysiological studies on the 11th, 40th, and 130th day demonstrated demyelination in the right median, ulnar, and posterior tibialis motor nerves as well as progressive decrease in SNAP in the right median, ulnar, and sural sensory nerves. Immunoadsorption plasmapheresis was performed five times. He noticed symmetrical limb weakness and progressive dysesthesia around the 16th day. He could not walk over 5 meters with assistance on the 31st day. Despite intravenous immunoglobulin therapy from the 73rd day, the patient's lower limb disabilities remained at discharge on the 163th day.

Discussion

To our knowledge, this is a rare case report regarding a CMV-GBS patient with antiganglioside antibodies whose demyelination might be associated with prolonged limb weakness.

P-08 Bilateral psoas signs

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Introduction: Psoas sign is s a medical finding that indicates irritation to the iliopsoas muscles and is positive when the patient has a painful hip extension. Bilateral psoas abscess is a rare condition with unspecific symptoms. We present the case of bilateral iliopsoas abscess, which bilateral psoas sign is the key diagnostic finding.

Case Presentation: A 71-year-old woman with hypertension, diabetes mellitus, and alcoholic liver cirrhosis presented to emergency department with difficulty in walking. Four months prior to admission, she had started to have trouble in walking, and gradually became bedridden. She also complained appetite loss and general weakness. On physical examination, her vital signs were BP 109/64 mmHg, PR 96 bpm, RR 21 bpm, and BT 38.5℃. She lied on the bed with the flexion position of both hips and knees. Her hip extension is painful bilaterally. Muscle strengths of both legs are slightly weak, but sensory was normal. Abdominal CT scan with contrast revealed bilateral psoas abscess. We started on vancomycin and cefepime intravenously, and metronidazole orally. We also performed drainage. Blood cultures and pus were positive for methicillin-sensitive Staphylococcus aureus. We treated with vancomycin and cefazolin intravenously for six weeks. She was finally discharged to the rehabilitation facility.

Discussion: We found that she had bilateral psoas signs and bilateral psoas muscle involvement was suspected. Therefore we perform CT scan, and the diagnosis of bilateral iliopsoas abscess was made. The symptom of bilateral psoas abscess is nonspecific and the classic triad of fever, back pain, and psoas spasm presents in only 30 percent of patients. Although psoas sign is common in diagnosing appendicitis, they can be caused by iliopsoas abscess and hemorrhage. Our case highlights the specific physical findings help with early diagnosis of rare disease and lead to avoiding unnecessary medical tests.

P-11 Systemic Amyloidosis: An Unexpected Diagnosis Amid Common Symptoms

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INTRODUCTION: Systemic amyloidosis causes abnormal deposits of amyloid protein and has various manifestations involving many organ systems. We report a case of systemic amyloidosis that initially presented with chronic diarrhea.

CASE: A 64-year-old woman presented with watery diarrhea and fatigue for one month and an eleven-pound weight loss over one week. Even though she visited outside clinics and underwent colonoscopy, only nonspecific findings including fragility of the colonic mucosa were found. Because her symptoms persisted, she was referred to our hospital for further evaluation and treatment.

On physical examination, she appeared mildly distressed and her vital signs were a temperature of 36.7oC, blood pressure 84/58 mmHg, pulse 96 beats per minute, respiratory rate 18 per minute, and pulse oximetry 100% in ambient air. Laboratory studies were remarkable for hemoglobin of 7.9 g/dL, potassium 2.7 mEq/L, total protein 4.8 g/dL, albumin 2.7 g/dL and troponin 1.9 ng/mL. Her electrocardiogram (ECG) revealed low voltage, but no ST-T wave changes. Echocardiography revealed left ventricular hypertrophy with normal ejection fraction. Biopsy via colonoscopy showed plasma cell accumulation and amyloid deposits in the colonic mucosa, and bone marrow biopsy revealed abnormal plasma cell deposition. Thus, we diagnosed systemic amyloidosis secondary to multiple myeloma.

DISCUSSION: In the case of persistent diarrhea, it may be difficult to determine the underlying disease because the differential diagnosis is broad. In our patient, the colon biopsy confirmed gastrointestinal amyloidosis. Suspect systemic amyloidosis in a patient presenting with chronic diarrhea and cardiac hypertrophy in the setting of an elevated troponin I and low voltage on ECG.

P-12 Combined Physical Signs Can More Effectively Rule Out Meningitis

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Introduction: Lumbar puncture is the gold standard test for diagnosis of meningitis. However, it is an invasive procedure and which patients may benefit for lumbar puncture is difficult to determine. It is reported that physical signs are not useful by themselves for ruling in or ruling out meningitis. We examined if the combination of physical signs is useful for ruling out meningitis.

Methods: We performed a single center, retrospective observational study. We investigated adult patients who presented to the outpatient department or the emergency room of Asahi General Hospital from 2009 to 2017 and received lumbar puncture. Patients who presented with fever, headache and no altered mental status were included.

Results: Among 70 patients we investigated, 27 patients had meningitis diagnosed based on lumbar puncture. No patient had bacterial meningitis, 26 had aseptic meningitis, and one had tuberculous meningitis. The sensitivity and specificity of neck stiffness were 64.0% and 71.1%, respectively. Its LR+ was 2.21, LR- was 0.51. Those of eyeball tenderness were 56.5% and 76.3%, LR+ was 2.39, LR- was 0.57. Those of heart rate <83 were 70.4% and 71.4%, LR+ was 2.46, LR- was 0.41. If all these symptoms are positive, the sensitivity and specificity were 22.2% and 97.7%, LR+ was 9.56, LR- was 0.80. If none of these is positive, the sensitivity and specificity were 92.6% and 37.2%, LR+ was 1.47, LR- was 0.20.

Conclusion: Our study showed that single physical sign is not useful. The absence of all 3 signs examined, may have sufficient sensitivity to rule out meningitis.

Limitation: This study is retrospective, and its sample size is relatively small. Further prospective studies should be done for making scoring system for meningitis.

P-13 A case of plasma cell type Castleman disease with sustained fever and arthralgia

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Introduction

Castleman's disease (CD) is multicentric, characterized by fever with chills, anemia, generalized lymphadenopathy and hepatosplenomegaly, and a more aggressive clinical course presentation. This report describes the diagnosis of plasma cell (PC) type CD presenting as stained fever and arthralgia.

Case Presentation

A 69-year-old man reported shoulder pain and numbness malaise from one year and six months prior. He visited our hospital when he became aware of fever. His body temperature (BT) was 38.1℃. Multiple superficial lymph nodes were palpable in the neck, axilla, and groin area. Swelling and pain were found in the joints of the two hands, wrist joints, and both shoulders. Laboratory findings were WBC 11,800/μl, Hb 10.4 g/dl, Plt 387000/μl, CRP 9.43 mg/dl, antinuclear antibody 40 fold, P/C ANCA negative, IgG 3202 mg/dl, and IgG4 154 mg/dl. No abnormal finding was obtained from imaging examination. Lymph node biopsy was performed, revealing follicular cells with large germinal centers and sheet-like proliferation of mature plasma cells positive for IgG and expressed kappa and lambda light chains. No neoplastic proliferation was found. From the IgG4/IgG staining ratio of 5.3% (high power field), we inferred that IgG4-related disease was negative. Serum soluble interleukin(IL)-2 receptors 1190 u/ml and IL-6 801 pg / ml were high. We diagnosed plasma cell (PC) type (CD). From steroid hormone therapy (methylpredonin 500 mg/day), an antipyretic effect was obtained with improvement of joint symptoms by steroid administration, which was decreased gradually. The patient remains under observation with PSL 5 mg today.

Discussion

PC-CD often shows signs of chronic inflammation such as fever, elevated erythrocyte sedimentation, weight loss, and systemic lymph node swelling with arthralgia.

P-15 A case of adult onset Leigh syndrome presented with acute renal failure and severe metabolic acidosis

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Introduction

Generally, Mitochondria disease caused by mutations in mitochondrial DNA or nuclear DNA, is typically seen in infancy or childhood. In this case, we report a rare cases of adult onset mitochondria disease with acute renal failure.

Case Report

A 43-year-old man referred to our institution originally presented with loss of consciousness and disorientation. The family history showed no nervous system or muscle dysfunction. He was noted to have deteriorated physically, reporting shortness of breath during and after exertion. An arterial blood gas analysis showed the following: pH 7.268, 14.9 Torr PCO2, 98.3 Torr PO2, 6.7 mmol/L HCO3. Urinalysis showed protein-positive (3+) 16 g/g･Cr. His serum laboratory values were BUN 146 mg/dl, Cr 12.0 mg/dl, Na 130mEq/L, K 6.7mEq/L, and lactate 28.4 mg/dl. Noncontrast CT findings were almost normal. We used continuous hemodiafiltration for acute renal failure and metabolic acidosis. But his metabolic acidosis was sustained. He suddenly presented myoclonic seizures at 14 days and showed a low-density signal of left temporal lobe cortical lesion in diffusion-weighted (DW) magnetic resonance imaging (MRI) at 43 days. Moreover, he presented left eye deviation. The brainstem showed symmetrical hyperintense lesions in DW MRI at 56 days. Mitochondrial DNA analysis from a serum specimen showed G13513A mutation. Therefor we diagnosed LS and L-arginine treatment was started. But he had complete AV block at 63 days and led to dead at 73 days.

Conclusion

In this case, mitochondria disease caused by G13513A mutation with acute renal failure before the neurological episodes were a rare case. In cases of renal failure with refractory metabolic acidosis, recurrent convulsion, and multiple organ failure, we should suspect mitochondria disease.

P-17 Neurolymphomatosis : uncommon cause of mononeuritis multiplex in a patient with malignant lymphoma

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Introduction: Neurolymphomatosis is a manifestation of lymphoma caused by the direct invasion of nerves by tumor cells. Though it is uncommon and rarely included as a cause of neuropathy, we report a case of a patient presenting with mononeuritis multiplex with systemic symptoms to raise the awareness of this aggressive disease.

Case Presentation: A 62-year-old woman presented with progressive right leg weakness over 3 months. She first felt heaviness in her right leg when climbing stairs. It gradually worsened, and led to frequent falls. Malaise, fever (37.7℃), and night sweats also developed. She had a weight loss of 6.5 lbs. over the previous 2 weeks. She presented to our hospital for further evaluation. On admission, she appeared pale and was sitting in a wheelchair. Neurologic examination revealed weakness of the right iliopsoas, quadriceps, and left anterior tibialis; decreased light touch of both hands, decreased vibration of both feet, and hyperreflexia of the upper and hyporeflexia of the lower extremities. Laboratory tests were notable for a hemoglobin 7.4g/dl, platelet count of 49,000/μl, LDH 1,652 U/l, creatinine 3.7 mg/dl, and uric acid 24 mg/dl. There was 2+ protein on urinalysis. Computed tomography scan showed hepatosplenomegaly and para-aortic lymphadenopathy. Bone marrow biopsy showed progressive infiltration of B-lymphocytes. FDG-PET scan showed high accumulation in the mandible, left humerus, pericardial fluid, right breast, and uterus. The final diagnosis of highly aggressive stage IV B-cell lymphoma was made and chemotherapy was started. She is still under treatment and has seen gradual improvement.

Discussion: Neurolymphomatosis usually presents with various types of neuropathy. Though it is rare, we should include it as a differential diagnosis of neuropathy because of its poor prognosis. Once suspected, bone marrow biopsy and FDG-PET scan should be performed for confirmation.

P-18 A Case of Acute Syphilitic Meningitis Diagnosed from Syphilis Blood Tests as Pre-exam for the Screening of Bloody Stools by Colonoscopy

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(Background)

Syphilis is a rapidly increasing sexually transmitted disease in Japan in recent years. However, patients conceal information regarding sexual contact in the first appointment with their doctor. We herein report a case of acute syphilitic meningitis diagnosed from rapid plasma regain card test (RPR) and Treponema pallidum (Tp) hemagglutination test (TPHA) as pre-exam for the screening of bloody stool by colonoscopy.

(Case)

The patient was a 56-year-old Japanese woman. 138 days before hospital admission, she came in contact with blood of her niece who cut her wrist and has syphilis. 75 days before admission, she showed symptoms of nausea and vomiting, and a sore throat. 23 days before admission, an otolaryngologist identified a painless cervical lymphadenopathy by MRI. 5 days before admission, she had bloody stools. In her first appointment, the doctor had still not been informed of her contact with syphilis, and the RPR and the TPHA were positive in the pre-exam for the elective colonoscopy. On the next day, she was admitted to our hospital. Lumbar puncture was performed due to high RPR titer; 128 times of blood test. The initial pressure rose to 30 cm H2O, and the quantitative RPR of the cerebrospinal fluid was 128 times. She was diagnosed with acute syphilitic meningitis and was treated with penicillin G for 2 weeks. Colonoscopic findings revealed multiple small ulcers on hospital day 9. The biopsy specimens of the chancres were immunochemical ositive for the Tp antibody. After being discharged, she reported she had begun to have homosexual relations with her niece during a recent year.

(Discussion)

The symptoms and signs of syphilis, known as the great imitator, are diverse. In cases where patients conceal information regarding sexual contact with syphilis, it is essential to consider syphilis from RPR and TPHA tests when patients show a wide variety of symptoms.

P-19 Staphylococcal toxic shock syndrome (STSS) caused by forgotten tampon

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STSS, a potentially fatal disease, requires early diagnosis and treatment. Symptoms vary, making diagnosis difficult and delaying treatment.

A 53-year-old woman presented in the ER with chills, vomiting, fatigue, lightheadedness and diarrhea of one day duration. A clinic had prescribed 500 mg/day of levofloxacin but her condition worsened. Unremarkable medical history except for hypermenorrhea, with last menstrual period starting one week prior.

Vital signs: BP (82/52 mmHg), tachycardia (96 beats/min), tachypnea (28 breaths/min), fever (39.7℃).

Physical Examination: somnolence without nuchal rigidity, eye discharge, abdominal rash, pain upon pressure in hypogastric region. Dark green discharge appeared upon removal of a tampon.

Laboratory results: WBC 20,100/μl (Neu 97.1%), Hb 14.6 g/dl, Hct 44.8%, Plt 1.07x103/μL, Na 134 mEq/L, K 3.3 mEq/L, Cl 100 mEq/L, HCO3- 19.2 mmol/L, BUN 42.8 mg/dl, Cre 1.36 mg/dl, glucose 96 mg/dl, ALT 98 U/L, AST 208 IU/L, T-bil 1.6 mg/dl, ALP 222 IU/L, CK 245 IU/L, CRP 21.44 mg/dl, PT 62.8%, PT-INR 1.22, APTT 36.6sec Fib 545 mg/dl, D-dimer 4.5 μg/d, and PCT 40.95 ng/ml.

Ceftriaxone 3 g TID was initiated after blood cultures, stool culture and a vaginal swab. Vaginal swab positive for methicillin-sensitive staphylococcus aureus, diagnosed with STSS due to the tampon. Therapy changed to clindamycin 900 mg TID, ceftriaxone 2 g BID, PCG 20 million units TID, immunoglobulin 5 g/day. She improved quickly and was discharged after 7 days.

STSS is mainly caused by staphylococcus toxin, especially toxic shock syndrome toxin-1 (TSST-1). Tampons are an etiological factor. Early diagnosis and treatment are difficult due to non-specific symptoms (vomiting, confusion, fever). Physicians should consider STSS in women with these symptoms. Treatment includes tampon removal, antibiotics and debridement. Antimicrobial therapies (clindamycin or linezolid) that neutralize TSST-1 production and intravenous immunoglobulin improve survival.

P-20 Eosinophilic granulomatous polyarteritis presenting as acute coronary syndrome; a case report

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Introduction

Eosinophilic granulomatous polyarteritis (EGPA) is a vasculitis characterized by asthma, chronic rhinosinusitis, purpura and eosinophilia but it may affect any organs. We report a case of eosinophilic myocarditis due to EGPA presenting as recurrent chest pain.

Case Presentation

A 38 year-old woman with history of long standing asthma and refractory sinusitis who reported rhinorrhea and cough three weeks prior to the admission. Two weeks later, chest pain and headache developed daily. On the day of admission, she felt squeezing substernal chest pain accompanied by dyspnea. Physical examination was remarkable for tachycardia, tachypnea and low grade fever. There were no wheezes, rash, and no evidence of neuropathy. Electrocardiogram (ECG) showed T-wave inversion in lead II, III, aVf and V4 through V6. Troponin-T was positive. Non-ST elevation myocardial infarction (NSTEMI) was suspected but urgent coronary angiogram was unremarkable. Laboratory tests showed marked eosinophilia, normal renal function and normal urinalysis. Antineutrophil cytoplasmic antibody (ANCA) was negative. Myocardial and sinus biopsies demonstrated eosinophilic inflammation. We diagnosed EGPA and started high-dose steroid treatment; her chest pain resolved.

Discussion

Chest pain without coronary risk factors with positive cardiac enzyme in a young woman led to a diagnosis of myocarditis due to EGPA based on a history of asthma, sinusitis, marked eosinophilia and eosinophilic infiltrates in myocardium. ANCA is often negative for cases with EGPA with cardiac involvement, which is rare for the first manifestation of the disease. Myocarditis, cardiomyopathy, spontaneous coronary artery aneurysm have been reported in which prognosis could be fatal. The patient responded well to therapy as steroid is the mainstay of treatment.

P-21 Validation and update of CURB-65 in older patients with clinically suspected sepsis: a retrospective cohort study

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Introduction: Predicting the prognosis of older patients with sepsis is crucial for the appropriate management and shared-decision making with patients and their families. While CURB-65 score was originally developed to predict the prognosis of patients with community-acquired pneumonia, its utility in patients with sepsis has been reported. However, it has not been specifically validated in older patients despite global super-aging societies. The aim of this study was to validate and update the CURB-65 in older patients with clinically suspected sepsis.

Design: Retrospective cohort study.

Setting: Shirakawa Kosei General Hospital, an acute care hospital in Japan

Participants: Patients older than 65 years old who had 2 sets of blood cultures taken between 1 April 2015 and 31 March 2017.

Main outcome measures: 30-day mortality

Statistical analysis: Calibration was evaluated with a calibration plot, while discrimination was assessed with the area under the receiver operating characteristic curve (AUC).

Results: Data from 921 patients were analyzed; mean age was 82.3 years (standard deviation 8.5), 50.0% were women, and 30-day mortality was 7.6%. The original CURB-65 visually showed good calibration. However, the AUC was 0. 65 (95% confidence interval (CI) 0.59, 0.71), indicating poor discrimination. To improve the performance of CURB-65, we updated the model by simply adding one point to the original score when age was 75-84 years or the peripheral capillary oxygen saturation level was < 90% and two points when age was >=85 years. The updated model showed visually better calibration. The AUC of the updated model was 0. 70 (95% CI 0.64, 0.76), with statistically significant improvement (p=0. 026).

Conclusions: The performance of the original model of CURB-65 was insufficient in older patients with clinically suspected sepsis. Our updated model can discriminate between patients with poor and good prognosis more accurately than the original model.

P-22 Choreo-athetosis in the lower limb following an infarct in the area of corona radiata

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Introduction

Involuntary movements following stroke are relatively common (0.08%). Hemichorea following stroke have been reported. However, monochorea are rarely reported. Here, we report a patient who presented with left lower limb choreo-athetosis secondary to ischemic stroke.

Case Presentation

A 68-year-old Japanese man presented with sudden onset of involuntary movements in the left leg of two days duration. Thereafter, the symptom persisted and he developed difficulty walking due to involuntary movements. Therefore, he visited ED of our hospital. Past medical history included hypertension and dyslipidemia. He did not take any medications.

On physical examination, vital signs showed blood pressure of 135/90 mmHg, heart rate of 98/min, respiratory rate of 12/min, body temperature of 36.8℃ and GCS was E4V4M6. On neurological examination, cranial nerves II to XII testing were intact. Manual muscle testing was 5/5 throughout. Sensations to tactile and pain were intact. Deep tendon reflexes were normal and Babinski reflex was negative. There were slow, irregular, rhythmic involuntary movements in his left leg. The remainder of the examination was normal.

Laboratory dates were non-contributory and electrocardiogram showed normal sinus rhythm. CT of the head showed low density in right corona radiata area. MRI of the brain showed the findings of acute ischemic stroke in the same area. The patient was diagnosed as ischemic stroke. Aspirin and atorvastatin were initiated. His symptom disappeared gradually.

Discussion

In case reports with choreo-athetosis following stroke, the site of pathology was thalamus, subthalamic nucleus, putamen, pallidum, midbrain tegmentum. There are nerve fibers through the corona radiate from basal nuclei to cerebral cortex. In this case, due to an infarct in the area of corona radiata, these fibers might be interrupted.

P-24 A Case of Subacute Thyroiditis after Multiple Vaccination

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Introduction

Subacute thyroiditis (SAT) is presumed to be caused by a viral infection or a post-viral inflammatory process. We report a case of SAT after multiple vaccinations.

Case description

A 58 year male presented to the hospital with 12 days history of fever and sore throat, since the very day receiving vaccines of HBV, Japanese encephalitis, rabies and tetanus. At his first visit, he was diagnosed with acute pharyngitis and had five-day course oral amoxicillin, but he did not get the better. He was instructed not to take any medicines , because his illness could be attributed to drug fever. After 3 days, there was no change in his condition. His throat was rechecked and his thyroid gland was slightly swelling in the right lobe accompanied by tenderness. Laboratory studies showed WBC count of 8200/μl, C-reactive protein of 12.9 mg/dl, at serum thyroid-stimulating hormone level of 0.008 μU/ml and a serum free triiodothyronine level of 9.7 pg/ml. TRAb was negative. 99 mTc-scintigraphy showed no uptake. He was diagnosed as subacute thyroiditis, and given propranolol 25 mg, once daily, and naproxen 200 mg, t.i.d.. His neck pain had been painful, four days later, he was treated with daily oral prednisone 40 mg. And then, he recovered quickly and no recurrence happened after tapering off.

Discussion

SAT is assumed to be associated with several etiologies such as viral infections, or post-inflammatory reaction. SAT could also be caused by vaccination. There are 5 reported cases of SAT after vaccination of influenza and HBV. Among these cases, they had fever and neck pain initially, were diagnosed within a week to a month after onset. Non-specific symptoms such as fever, malaise or neck pain often appear in 1-2 days after vaccination, and they usually last within 2 days. We suggest that SAT should be considered when a post-vaccination patient has a prolonged fever with neck pain.

P-25 Successful treatment of plural effusion with glucocorticoid in a patient with Synovitis-acne-pustulosis- hyperostosis-osteitis syndrome

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Introduction: Synovitis-acne-pustulosis-hyperostosis-osteitis (SAPHO) syndrome is a rare inflammatory disorder in which bone, joints and skin are mainly affected. Here we report a case of pleural effusion due to SAPHO syndrome, which was successfully treated with glucocorticoid.

Case Presentation: A 57-year-old woman with a history of palmoplantar pustulosis(PPP) developed anterior chest pain and dyspnea two weeks prior to admission. She visited a nearby clinic and chest X-ray showed bilateral pleural effusions. She was referred to our hospital. Vital signs showed blood pressure 144/105 mmHg, pulse rate 89/min, temperature 35.9℃, respiration rate 20/min, and SpO2 97% on room air. Breath sounds were diminished in both lower lung fields. There was tenderness at the sternocostal joints. Desquamation was observed in her palms and soles. Labs showed mild elevation of leukocyte count and prolonged erythrocyte sedimentation rate. Liver and kidney functions were normal. Pleural fluid analysis showed exudative effusions and lymphocytosis. Adenosine deaminase was low. Cytology, smear and culture of pleural effusion were negative. Blood cultures were negative. Bone scintigraphy revealed accumulation at the sternum. Given her history of PPP and the findings of sterile osteitis of the sternum, clinical diagnosis of SAPHO syndrome was made. After excluding other possibilities, SAPHO syndrome was assumed to be the cause of the pleural effusion. NSAID showed no improvement. Oral prednisolone 60 mg daily was commenced. Thereafter, pleural effusion disappeared. She is currently followed at an outpatient clinic.

Discussion: Our case was unique because of the presence of pleural effusion. We searched English and Japanese articles and only few cases have been reported. Physicians should consider the possibility of SAPHO syndrome in patients with anterior chest pain and pleural effusions.

P-26 Meningitis-retention syndrome: the clue is in the bladder

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Meningitis-retention syndrome (MRS) is a rare combination of acute urinary retention and aseptic meningitis. Diagnosis of aseptic meningitis is sometimes challenging because of its nonspecific symptoms at presentation. We report a case in which the appearance of acute urinary retention led to the diagnosis of aseptic meningitis as the cause of fever and back pain.

A 75-year-old woman with a history of hypertension and ascending aortic dissection repair presented to our clinic with a 3-day history of diffuse back pain and fever. The back pain developed gradually, occurring with movement and improving with rest. On examination, her temperature was 37.2 degrees Celsius, jolt accentuation was positive, and severe cervical to sacral spine tenderness was noted. Laboratory tests were unremarkable except for a creatinine level of 1.1 mg/dL. Urinalysis showed 2+ bacteria, but no pyuria. After ruling out potentially serious diagnoses such as an infected aneurysm, we presumptively diagnosed pyelonephritis and treated her with intravenous (IV) cefotiam for five days.

Five days after admission, she complained of urinary frequency. Abdominal ultrasound showed 650 mL of urine in the bladder. Given her symptoms and physical examination findings, we suspected meningitis. Lumbar puncture was performed. Cerebrospinal fluid analysis showed a white blood cell count of 129/μL with 98% monocytes, glucose level less than 40% of serum glucose, and a positive varicella zoster virus-polymerase chain reaction leading to a diagnosis of MRS. All symptoms resolved after treating her with ten days of IV acyclovir.

In patients with MRS, the typical meningitis symptoms usually precede urinary retention by nine days. Almost all cases have shown a good prognosis with no specific treatment. As in our case, MRS should be considered in the differential diagnosis of patients with newly developed urinary retention plus symptoms of meningeal irritation.

P-27 A case of 61-year-old woman with multiple episodes of pseudogout attack from early 30s associated with Gitelman syndrome

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Introduction

Calcium pyrophosphate crystal deposition (CPPD) disease, also known as pseudogout, is one of the most common diseases causing arthritis among elderly patients. However, CPPD disease is often underdiagnosed, especially in younger patients.

Case presentation

A 61-year-old woman was referred to our hospital from orthopedic clinic because of multiple episodes of arthritis and chondrocalcinosis in many joints. When she was 33 years old, she had swelling and pain in the sternoclavicular joint, which was relieved by some analgesic drugs. After that, she had similar symptoms in other limb joints once or twice every year. One week before she visited our department, she went to orthopedics because of left hallux's MTP joint pain. When she presented to our hospital, she had painful swelling in her both ankles. X-ray showed chondrocalcinosis in many joints including shoulders, knees, and ankles. Arthrocentesis revealed cloudy yellowish fluid with CPPD crystals, making diagnosis of CDDP disease. The laboratory data showed hypokalemia (3.6 mEq/l), hypomagnesemia (1.4 mg/dl) with inappropriate renal magnesium wasting (fraction excretion of magnesium 8.6%), normocalciumia (9.6 mg/dl) with hypocalciuria (calcium-creatinine ratio 0.06 mmol/mmol), normophosphatemia (3.5 mg/dl) and metabolic alkalosis. Taken together, a diagnosis of Gitelman syndrome (GS) was made and mutations (Ala388Asp, Leu858His) in the SLC12A3 gene was confirmed by genomic DNA analysis.

Discussion

Several metabolic disorders have been established for risk factors for CPPD disease, such as hemochromatosis, hyperparathyroidism or hypophosphatemia as well as hypomagnesemia. GS is a rare genetic disease, which is usually diagnosed during adolescence or adulthood. When we see patients with CPPD disease younger than middle age, screening for these diseases that predispose to CPPD disease is required.

P-29 Untreated Sheehan's syndrome case with adrenal crisis and influenza A virus infection

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Introduction: Sheehan's syndrome (SS) results from severe hemorrhage during or after delivery. We report a case of long-term untreated SS leading to adrenal crisis associated with influenza A virus infection.

Case Presentation: A 50-year-old Japanese woman with a long-term history of infertility, cold intolerance, hoarseness, fatigue, appetite loss, and constipation was transferred to our ICU with consciousness loss, fever, and hypotension. She had consciousness disturbance with fever 2 years before and fetal death with hemorrhagic shock during delivery 18 years before. She was not aware of the need for a cortisol replacement therapy. Examinations showed a low body mass index, temperature at 37.4℃, blood pressure at 102/63 mmHg (under noradrenaline infusion), irregular heart rate at 93 beats/min, respiratory rate at 25 breaths/min, and symmetric deep tendon reflexes 1+/1+ with prolonged relaxation phases. She had an enlarged painless thyroid, pale dry skin, and thin eyebrows, without axillary hair. She was in a state of stupor and intubated. Laboratory findings included WBC 5,570 /μL, Hb 8.7 g/dL, MCV 89.2 fl, CRP 8.37 mg/dL, Na 137 mEq/L, K 4.3 mEq/L, Cl 111 mEq/L, FPG 111 mg/dL, cortisol ≤ 0.9 μg/dL, and positive influenza A antigen. Hormone loading tests showed a delayed or partial reaction to LH, FSH, and PRL and no-reaction to GH after 60 min. ACTH and TSH were responsive, but fT4 remained low, and cortisol did not respond to the ACTH loading test. Brain MRI revealed an empty sella. We diagnosed her as having anterior hypopituitarism from SS with adrenal crisis and influenza A virus infection. We prescribed cortisol and levothyroxine replacement and discharged her on hospital day 21.

Discussion: Our patient led a relatively normal life without cortisol replacement, but the influenza virus infection led to shock. An influenza A virus pandemic puts untreated SS patients at mortal risk.

P-30 A Spanish tourist with Paget-Schroetter syndrome (PSS) induced by backcountry snowboarding.

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Paget-Schroetter syndrome (PSS) is characterized by deep vein thrombosis (DVT) in the arm due to the combination of a thoracic outlet anatomical abnormality and vigorous exercise of the affected limb. Complications of PSS include pulmonary embolism and residual venous obstruction, and recent expert opinion suggests that early invasive therapy is superior to anticoagulation. We report a case of a snowboarder who developed PSS at a remote resort in Hokkaido, Japan.

A 30-year-old male presented with a 2-day history of left arm pain, which he first noticed upon awakening. He had been back-country snowboarding, hiking several mountains using ski poles. He was otherwise medically well on no regular medications. Physical examination showed tenderness, edema, and distention of the superficial veins of his left arm. Imaging revealed thrombosis in his left subclavian vein. A thrombophilia screen was normal. A diagnosis of PSS was made based on the characteristic history, and after exclusion of other causes. Since catheter-directed therapy was unavailable in our area, we initiated anticoagulation with unfractionated heparin and transferred the patient to a tertiary hospital in Ibaraki, Japan for definitive treatment. He then underwent catheter-directed removal of the thrombus. Unfortunately, after thrombus removal, he had persistent anatomical compression of his left subclavian vein due to thoracic outlet onstruction, and returned to Spain to undergo a decompression operation.

We believe this patient developed PSS due to a combination of the cold weather, compression from his backpack, and excessive upper body physical activity. It illustrates the importance of early diagnosis and aggressive treatment to prevent subsequent complications. This syndrome should be considered in upper limb DVT of young athletes.

P-31 Aspergillus revealed by cessation of antibiotics, treatment by removal of spinal implant.

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introduction

In patients with infection and antibiotics previously prescribed, it's often difficult to detect the causative microorganism. In this situation, discontinuation of antibiotics and repetition of culture can be useful for identifying the infectious agent.

case description

A 54-year-old male was referred to us with intermittent fever and weakness in the lower extremities. 9 years before hospitalization, he had left-upper lung resection and chemotherapy for lung cancer. 5 years before, there was suspicion of lung aspergillosis based on imaging findings and he was prescribed itraconazole (ITCZ). He also took clarithromycin (CAM) with chronic bronchitis. 2 years before, he had posterior cervical and lumbar spinal fusion with implant following a car accident. On referral, examination revealed sensorimotor disturbance below spinal level L1, bladder and bowel dysfunction, increased patellar reflex and Babinski's sign. Contrast-enhanced MRI revealed epidural abscess from Th2 to Th6 along the implant. Spinal decompression and drainage was immediately performed, but implant removal could not be achieved for fear of spinal instability. Vancomycin and ceftriaxone as empirical therapy was started and ITCZ and CAM was discontinued. Despite re-operation, all cultures were negative and the disease could not be controlled. For control of the source of infection, we removed the implant carefully. After surgery, aspergillus sp. grew from epidural abscess and we started voriconazole treatment. The patient's condition improved, but the sensorimotor disorder remained.

discussion

There are no other reports of aspergillus epidural abscess with spinal implant infection. Sometimes, previously prescribed antibiotics mask causative microorganisms. By cessation of antibiotics with careful observation and repetition of culture, diagnosis could be made and this rare, difficult case could be treated.

P-32 A Rare Presentation of SIAD as the Initial Presentation of Gastrointestinal Cancers

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Introduction: The syndrome of inappropriate antidiuresis(SIAD) is a common cause of hyponatremia. Malignancies are one of the most important causes of SIAD and the association with small cell lung cancer is well known, but other cancers are rare. Hyponatremia as initial presentation is also an uncommon feature of malignancy-associated SIAD. We report a rare case with SIAD in a 77-year-old patient as the initial presentation of gastrointestinal cancers.

Case Presentation: A 77-year-old man with a history of chronic kidney disease and anxiety disorder presented with a month history of anorexia and weight loss at the regular follow-up visit. He denied a headache, nausea, and lethargy. Vital signs were normal, and the patient appeared to be euvolume. His laboratory test showed serum Na 114 mEq/L, serum osmolality 232 mOsm/L and urine Na 61 mEq/L. He was diagnosed to have SIAD. His hyponatremia was improved to 135 mEq/L by a fluid restriction on the 7th day after hospitalization. Anorexia also improved. Since there was no apparent cause of SIAD, we plan to exclude malignancies. We found no abnormalities in a non-contrast chest and abdominal CT scan. Since the patients had anorexia, we performed an upper gastrointestinal endoscopy and found that the patient had advanced esophageal cancer and early gastric cancer. Subsequent contrast CT scan revealed lymph node metastasis. He referred to another hospital for further treatment of two gastrointestinal tumors.

Discussion: Approximately 20-30% of SIAD cases are related to malignancies and the majority of cases are caused by small cell lung cancer or head and neck cancer. However, several reports suggested that any tumors can cause SIAD. Also, hyponatremia as an initial presentation of malignancy-associated SIAD is rare. In this case, we discovered esophageal cancer and gastric cancer during etiology workup of SIAD. Even if hyponatremia caused by SIAD improved, it is essential to exclude underlying malignancy.

P-33 The Bayesian Predictive Probability Prevents Further Harmful Randomized Controlled Trials

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[Background] To do further randomized controlled trials(RCTs) in a meta-analysis(MA) does harm if they are unlikely to change the already established evidence of efficacy, especially in mortality. In fact, they have continued partly because there is no quantitative criteria to predict harmful RCTs.

[Objectives] To identify the cut-off point of the predictive probability of harmful RCTs calculated by Bayesian analysis as the numerical criteria to prevent them.

[Design] Retrospective cohort.

[Database] Cochrane Database of Systematic Reviews between 2013 and 2017.

[Including studies] RCTs in MA such that it evaluated the effect of internal interventions on mortality , the effect measure was odds ratio (OR), risk ratio (RR), or risk difference (RD), and that the quality of the evidence was high of the GRADE approach.

[Main exposure variable] The probability (P) calculated by Bayesian analysis that point estimates of OR,RR, or RD in a cumulative meta-analysis(CMA) were less than 1 or 0 if the summary estimate's was less, or that they were more if it was more.

[Main outcome measures] Harmful RCTs defined as follows: a continuum of their point estimates of OR,RR or RD in a CMA continued up to the latest RCT to be consistently less than 1 or 0 if the summary estimate's was less, or that they were more if it was more: in the continuum, the first RCT was excluded.

[Results] Data from 110 RCTs (15 MAs) were analyzed. The outcome rate was 83%. Multivariable analysis adjusting for year, order and tau.square showed that P $\geq$75% as the optimal cut-off point was the independent predictor(OR 40; 95% CI 1.8 to 898) and the sensitivity and specificity were 71% and 89%. The areas under the ROC curves of P were 0.91 (95% CI 0.85 to 0.98).

[Conclusions] P $\geq$75% was first found to be the cut-off point as the quantitative criteria to probably prevent further harmful RCTs.

[Limitation] Retrospective way in one database.

P-34 Adrenal insufficiency due to Rathke cleft cyst hemorrhage, with sudden-onset headache followed by recurrent generalized symptoms

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INTRODUCTION

Many cases of Rathke cleft cyst (RCC) are asymptomatic. When it gets larger, it causes headache, vision abnormality, hypopituitary dysfunction. The most of symptoms of adrenal insufficiency (AI) are nonspecific, therefore, diagnosis may be difficult in its early stage. We report the case of AI due to RCC hemorrhage, in which medical history help for the diagnosis.

CASE DESCRIPTION

A 61-year-old farmer man referred to our hospital for a 5-month history of recurrent fever. He had sudden headache and bitemporal blinking light 4 month ago. Although the headache disappeared quickly, the visual symptoms remained about a month. From that time, he recognized large joint pain, fatigue, anorexia, and weight loss of 7 kg. These symptoms often occur on the day after doing agricultural work, and spontaneously resolved within 2-3 days. His vital signs were as follows: temperature, 36.6℃; pulse, 74 per minute; and blood pressure, 80/52 mmHg. The range of motion of the joints and visual field were normal. Laboratory tests showed no abnormality of electrolyte nor evidence of inflammation. We considered AI from a history of nonspecific joint pain, anorexia, weight loss, hypotension and fever triggered by physical stress, and a pituitary stroke from sudden headache with bitemporal visual field disturbance. The workup revealed a decreased morning serum cortisol level (3.1 mcg/dL, normal: 5.0-25.0). In the magnetic resonance imaging of head, there was a RCC at the Turkish saddle. Treatment was initiated using oral prednisolone (20 mg per day), which rapidly resolved his symptoms in a day.

DISCUSSION

It was assumed that he originally had a RCC, which caused secondary AI, and worsened at a stroke by the subsequent intracystic hemorrhage. The Systemic symptoms after sudden headache considers secondary AI associated with pituitary stroke.

P-35 A Great Imitator: Miliary Tuberculosis Presented with Septic Shock

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Introduction

Miliary tuberculosis (TB) results from hematogenous dissemination of mycobacterium tuberculosis. The patients infected with miliary TB rarely present with septic shock and is difficult to diagnose. We present a case of miliary TB initially misdiagnosed as septic shock from bacterial pneumonia.

Case presentation

A 77-year-old woman with a history of chronic atrial fibrillation and type 2 diabetes mellitus came to the hospital presenting with appetite loss, fever, dyspnea and general malaise for 4 days. She had never taken immunosuppressant therapy. On physical examination, her temperature was 37.0 degrees Celsius, blood pressure was 80/60 mmHg, heart rate 120 beats per minute and regular, and respiratory rate 26 breathes per minute. Oxygen saturation was 98% on 4L of oxygen per nasal cannula. She had bilateral coarse crackles on lung examination. On laboratory testing, her hemoglobin was 7.4 g/dL, platelet count 49.00 x 109/L, creatinine 3.73 mg/dL, and LDH 1652 U/L. Computed tomography scan showed bilateral pleural effusion with diffuse alveolar infiltration and hepatosplenomegaly. We suspected septic shock due to severe bacterial pneumonia and started intravenous piperacillin-tazobactam, vancomycin and azithromycin. On the next day, however, her respiratory status deteriorated. Despite aggressive treatment, she died 4 days after admission. An autopsy was performed, which showed multiple caseous glanulomas in both lungs, liver, spleen, and bone marrow. Thus, miliary TB was diagnosed.

Discussion

The in-hospital mortality rate of patients with septic shock from tuberculosis is reported to be 79%. Without the results of the autopsy, we were unable to diagnose tuberculosis given her acute clinical course, the lack of a history of TB exposure and her immunocompetent status. In the context of an aging society, the recognition of miliary TB is important for diagnosis, treatment, and prevention of spread of this contagious infection.

P-36 Brain stem stroke after gluteal herpes zoster

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Introduction:

Varicella-zoster virus (VZV) is known to cause broad spectrum of neurological diseases including meningitis, radiculomyelitis and stroke. While gluteal zoster can cause urinary retention called Elsberg syndrome, stroke is typically caused by ophthalmic-distribution zoster. We herein report a case of brain stem stroke after gluteal herpes zoster.

Case Description:

An 85-year-old man presented to our emergency room with diplopia and both eyes' ptosis. Thirteen days before admission, he had diagnosis of right gluteal herpes zoster and Elsberg syndrome. Since his zoster recovered by valaciclovir (2000 mg/day), diplopia and both eyes' ptosis suddenly appeared four days before admission. He denied fever, headache or loss of consciousness. On examination, vital signs were within the normal range. There were scabbing blisters on his right gluteal. Neurological examination showed nearly complete both eyes' ophthalmoplegia and ptosis. Magnetic resonance imaging showed acute infarction of midbrain. Lumber puncture demonstrated mononuclear pleocytosis (367 white blood cells with 93.1% lymphocytes), with elevated protein (481.4 mg/dl) and normal glucose to serum ratio. Cerebrospinal fluid (CSF) to serum VZV immunoglobulin G (IgG) ratio demonstrated high titers of anti-VZV IgG in CSF (6.3), but did not detect the presence of VZV DNA polymerase chain reaction. He was treated with acyclovir (750 mg/day) and prednisolone (50 mg/day). Urinary retention fully recovered, but ophthalmoplegia and ptosis continued.

Discussion:

Though ophthalmic-distribution zoster is said to increase the risk of stroke, the stroke occurred after gluteal herpes zoster in this case. Clinician should know even the herpes zoster except ophthalmic part can cause stroke. The main mechanism of stroke is vasculitis caused by direct infiltration of VZV. Unlike the general cerebral infarction, acyclovir and steroid are recommended as the treatment for herpes zoster induced infarction.

P-37 A case of abdominal compartment syndrome due to portal vein embolism in liver cirrhosis with multiple renal complications

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Introduction

We report a case of abdominal compartment syndrome due to portal vein embolism in liver cirrhosis (LC) presenting with a complicated clinical course.

Case Presentation

A 62-year-old man with LC caused by chronic Hepatitis B virus infection and a serum creatinine (sCr) level of 0.8 mg/dl had been treated with "tenofovir disoproxil(TDF)" in the department of hepatology. 16 months after the initiation of TDF, his sCr level rose to 2.0 mg/dl over a period of 4 months. With suspicion of TDF-induced renal failure, he was referred to nephrology for further evaluation. On the basis of microscopic hematuria with proteinuria, drug-induced kidney injury and glomerulonephritis including hepatitis associated etiology were suspected and renal biopsy was performed. Pathology showed IgA nephropathy with poor active lesions, and steroid treatment was provided. In spite of this, renal function declined abruptly. In addition, the case was complicated with portal vein embolism and ascites developed, so anti-coagulation therapy was started. Considering that this rapid course of renal failure was atypical for IgA nephropathy, other causes were seemed to coexist, such as hepatorenal syndrome (HRS) or abdominal compartment syndrome (ACS) due to ascites from the portal vein embolism. It seemed that both the timing of the increase of ascites and the deterioration of renal function were linked, so we decided to do abdominal paracentesis for the prevention of HRS. After the paracentesis, urinary output increased and renal function was dramatically improved.

Discussion

We report a rare case of ACS due to portal vein embolism in a LC patient. A wide variety of causes should be considered in a case of renal failure coexisting with liver failure. In our case, multifaceted evaluation and careful observation were considered to be effective for diagnosis and treatment.

P-38 Be on your guard against ChE inhibitor!

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Introduction

Distigmine bromide, an anticholinesterase, is widely used for neurogenic bladder. This was reported to cause cholinergic crisis as a fatal side effect. So, the clinical dose has been limited for dysuria.

We report a case of cholinergic crisis caused by distigmine bromide, even though its usual dose.

Case presentation

The patient is a 77-year-old Japanese male with the past medical history of neurogenic bladder due to old cerebral infarction which he developed 8 months ago. He was prescribed 5 mg/day of distigmine bromide at that time.

He conspicuously lost his appetite one week prior to admission and was transferred to emergency room because of his altered mental status with excessive salivation, bradycardia and hypoxia.

On his arrival, his vital signs were BT 36.3℃, HR 90/min, regular rhythm, RR 24/min, O2 saturation 91% with supplemental oxygen flow at 10 l/min, and BP 58/42 mmHg. He had hypoxia and shock. Physical examination only indicated the symptom of parasympathicotonia such as miosis and sweat. There were no significant signs of septic shock and cardiogenic shock like arrhythmia. His serum ChE value decreased at 16 IU/l.

Therefore cholinergic crisis was suspected. The symptoms and shock were improved by atropine.

Serum concentration of distigmine bromide found to be 57.3 ng/ml, which is five times more than its therapeutic range. Accordingly, a diagnosis of cholinergic crisis was made. After stopping it, the excessive secretion and hypotension were improved in step with a rise of ChE value.

Discussion

Distigmine bromide is commonly prescribed in Japan despite the risk of cholinergic crisis, which is fatal condition. In many cases, it occurs right after medication, but in almost quarter cases, it does after more than a month.

Therefore, if the patient taking it has the symptoms of cholinergic stimulation, cholinergic crisis should be listed in the differential diagnosis, and then, we need to stop it immediately and consider using atropine.

P-39 Successful treatment of necrotizing fasciitis caused by Aeromonas hydrophila

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Introduction:

Aeromonas hydrophila (A. hydrophila) causes necrotizing fasciitis (NF) in cirrhotic patients or immunocompromised hosts. The mortality rate for aeromonas septicemia and NF is 33% or higher. Infection is usually preceded by exposure to fresh or brackish water.

Case Presentation:

A 47-year-old male patient with untreated alcoholic cirrhosis was admitted to our hospital with acute onset of confusion and fever. He had no recent exposure to fresh or brackish water or trauma. On examination, consciousness was GCS E3V4M5, he was febrile to 40.8℃, heart rate 157 beats/min, and blood pressure 137/95 mmHg. Respiratory rate 24 /min and the oxygen saturation 99% while the patient was breathing simple mask 10 L/min. Mild erythema were present on the legs without bullae. CT showed edema of soft tissue on the legs without gas production. The patient was suspected of having NF because of the severity of his condition, but he presented no severe skin lesion. Meropenem, vancomycin and clindamycin (CLDM) were administered with ICU . Prompt exploratory incision of the legs was performed by orthopedists. The fascia was swollen with necrosis and dishwater-gray exudate. The patient was diagnosed with NF and surgically debrided. Gram-negative bacillus was noted in exudate Gram stain. He was administered minocycline instead of CLDM. A. hydrophila was identified from blood culture and the antimicrobial agents de-escalated to ciprofloxacin. Finally, the patient was cured without sequelae.

Discussion:

Early diagnosis and prompt debridement were key to successful treatment in this case. Our patient had suspected NF from his medical history of alcoholic cirrhosis and severely poor general condition, although his mild skin lesions and no history of exposure perhaps indicated otherwise. Our surgical consultant immediately performed surgical exploration as required. Close cooperation with an experienced surgeon and prompt attention to NF are important for successful treatment.

P-40 The case of a portal-hepatic venous shunt of an elderly patient without cirrhosis

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INTRODUCTION

The cases of a portal-systemic venous shunt without cirrhosis are rare. We report the case of a portal-hepatic venous shunt of an elderly patient without cirrhosis promptly diagnosed and treated.

CASE PRESENTATION

The patient was an 80-year-old Japanese man. Intermittent confusion had continued from one year before admission. He had experienced episodes of ataxia from three months before admission. Confusion had become worse from the day before admission, and he was taken in the ambulance. No history of liver disease, trauma and surgery was elicited. On arrival, the level of consciousness was E1V3M5 by the Glasgow Coma Scale, blood pressure was 179/98 mmHg, heart rate was 92 beats/min, respiratory rate was 14 breaths/min, SpO2 was 99 % in room air and body temperature was 36.1℃. General physical findings were not significant, but neurological examination showed symmetrical hyperreflexia of the arms and legs. Blood test revealed hyperammonemia (117 μg/dL) and mild liver damage. Urine test did not show significant findings. Abdominal Contrast CT scan and ultrasonography revealed a right portal-right hepatic venous shunt. There was no finding of cirrhosis, hepatitis B or hepatitis C. He was diagnosed with a portal-hepatic venous shunt without cirrhosis. After admission, branched-chain amino acid treatment was initiated and the level of consciousness had become better. On the thirteenth day, coil embolization to the shunt was performed. On the following day, his serum ammonia level and consciousness quickly returned to normal. The post-embolization course was uneventful. On the sixteenth day, he was discharged.

DISCUSSION

The cases of hyperammonemia by a portal-systemic venous shunt without cirrhosis are rare. But the analytic approach allows prompt diagnosis and the shunt could be treatable. Thus we should keep in mind that hyperammonemia can be led by a portal-systemic venous shunt without cirrhosis.

P-41 Prescribing Sodium Bicarbonate for Acute Vertigo Care: Case-Based Survey.

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Background: Intravenous sodium bicarbonate is widely used for acute vertigo care in Japan. However, research about the efficacy of sodium bicarbonate was limited. We investigated the difference of preference to use sodium bicarbonate among otolaryngologist (Ear, Nose and Throat (ENT) physicians), emergency physician (EM), internal medicine (IM).

Methods: This was a multi-center case-based survey from 2016 to 2017. We invited physicians with 3 years or more carriers from six teaching hospitals in Japan. There was no exclusion criterion. We developed four contextually validated scenarios; benign paroxysmal positional vertigo (BPPV), vestibular neuritis, Meniere disease, and nonspecific vertigo. Based on the scenario, we asked physicians preference about examination and treatment, including sodium bicarbonate, for acute vertigo by multiple choice questions. The information about physician's background and hospital were also obtained. Our primary outcomes were the difference of physician's preference between departments. Fisher exact test was applied to the analyses.

Results: 151 physicians were included, where 48 were EM, 36 were IM, and 67 were ENT. Eighteen questions (Two back ground related, five examinations related, ten treatments related) were statistically different between departments. Physicians were willing to prescribe sodium bicarbonate for BPPV (Total: 56.3%, EM: 27.1%, IM: 25.0%, ENT: 58.2%, $p<0.01$), vestibular neuritis (Total: 56.3, EM: 27.1%, IM: 27.8%, ENT: 91.0%, $p<0.01$), Meniere disease (Total: 58.3, EM: 33.3%, IM: 30.6%, ENT: 91.0%, $p<0.01$), and nonspecific vertigo (Total: 50.3%, EM: 33.3%, IM: 30.6%, ENT: 91.4%, $p<0.01$).

Conclusion: To detect efficacy of sodium bicarbonate, we need further research in the clinical settings.

P-42 Difficulty in the diagnosis of Kawasaki disease of adolescence

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Introduction: It is generally accepted that Kawasaki disease frequently develops during childhood. We report here a rare case of Kawasaki disease of adolescence. Even in adults, Kawasaki disease must be considered with patients who have a persistent fever and rash for 5 or more days.

Case Presentation: A 16-year-old Japanese man was seen at the ER for 3 consecutive days. He had fever and generalized urticaria, and as he had taken oral acetaminophen for the first time, he was diagnosed with drug eruption, instructed to discontinue taking the oral medication and was sent home. However, the symptoms persisted and on the 4th day of illness he developed strawberry tongue and sore throat, so he re-visited the hospital. On the 6th day of illness, he developed desquamation in the neck, bulbar conjunctive hyperemia, and erythema of fingers and hands, and a rapid streptococcal test result was positive. On the basis of these findings, scarlet fever or Kawasaki disease was suspected. Treatment with ceftriaxone was started on the same day, but there was little improvement in his symptoms, so he was diagnosed with Kawasaki disease. On the 7th day of illness, IVIG therapy was started and the symptoms rapidly improved.

Discussion: Kawasaki disease is systemic vasculitis syndrome of unknown etiology that was first reported by Tomisaku Kawasaki. Generally, the disease commonly occurs in infants aged ≤ 5 years. The disease is diagnosed when 5 of the 6 items in the Kawasaki Disease Diagnostic Criteria are met. This patient met the diagnostic criteria but the rapid streptococcal test result was positive, which made it extremely difficult to differentiate Kawasaki disease from scarlet fever. In this case, the diagnosis was finally reached after discussion with pediatricians. Even in adults, Kawasaki disease must be considered with patients who have a persistent fever and rash for 5 or more days.

P-43 Diffuse alveolar hemorrhage due to primary pulmonary angiosarcoma

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Introduction

Diffuse pulmonary hemorrhage (DAH) is a serious condition characterized by widespread intra-alveolar hemorrhage that originates from the pulmonary microcirculation. We report a case with DAH due to primary pulmonary angiosarcoma.

Case Presentation

An 82-year-old woman with a history of hypertension presented with dyspnea and hemoptysis for 3 days. On examination, the blood pressure was 116/64 mmHg, pulse rate was 112 beats per minute, respiratory rate was 20 breaths per minute, body temperature was 36.9℃, and SpO2 was 89% on breathing ambient room air. Inspiratory rales were heard at both lung bases. Laboratory findings revealed a WBC count of 35700/μl, a hemoglobin level of 6.1g/dl, a platelet count of 25000/μl, CRP of 4.83mg/dl. Liver and renal function test was normal. Immunologic examinations were all within normal limits. A CT scan of the chest showed bilateral pulmonary consolidation, especially in both lung bases. Because we considered pneumonia or vasculitis as a cause of pulmonary hemorrhage at first, Antibacterial drug treatment, steroid pulse therapy and plasma apheresis were given. However, the hemoptysis did not improve, and she died on the 12th hospital day. The pathological anatomy revealed primary pulmonary angiosarcoma.

Discussion

DAH is histologically divided into three types: pulmonary capillaritis, bland pulmonary hemorrhage, and diffuse alveolar damage. Moreover, etiologies of DAH are various such as following, vasculitis, immunologic, coagulation disorders, idiopathic pulmonary hemosiderosis, infiltrative lung diseases, and others. DAH is a medical emergency that often results in death, therefore the underlying cause must be determined.

Angiosarcoma is a rare soft-tissue sarcoma of endothelial cell origin that has a poor prognosis. Although angiosarcoma can arise in any soft-tissue structure or viscera, lung origin is rare.

If the cause of DAH is unidentified, we should consider the possibility of angiosarcoma.

P-44 IVC syndrome due to the compression of a large liver cyst — a treatable cause of AKI —

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Introduction

Most of liver cysts are asymptomatic and tend to have a benign clinical course. On the other hand, some large cysts may be symptomatic and cause complications such as intracystic hemorrhage, rupture, infection, and compression of adjacent structures. There are few reports of liver cyst that compresses inferior vena cava (IVC), eventually leads to renal dysfunction. Here in, we present a unique case of a patient with a large liver cyst presented with acute kidney injury (AKI). AKI was caused by congestion of renal veins due to IVC compression, which dramatically improved after the decompressive procedure.

Case introduction

A 73-year-old man presented with one month of bilateral lower leg edema. On admission, physical examination was notable for upper abdominal distention with pretibial slow pitting edema. Laboratory tests showed moderate elevation of serum creatinine without elevation of brain natriuretic peptide. The urine dipstick showed 2+ proteinuria, and protein-to-creatinine (P/C) ratio of spot urine was elevated. Contrast enhanced computed tomography revealed a large cyst on caudate lobe almost completely compressing the IVC, and a marked growth of collateral flow around IVC. To decompress the IVC, a catheter was placed into the cyst and the cavity was sclerosed by administering Ethanolamine oleate. Following the procedure, there was a marked reduction of the size of the cyst and the IVC was successfully decompressed. The blood flow of IVC was restored with a reduction of collateral flow. Bilateral lower leg edema and upper abdominal distention completely disappeared. His serum creatinine and P/C ratio of spot urine normalized, and still has maintained normal ranges 6 months after the procedure.

Discussion

It has become well known that decongestion of renal vein is an important concept in a management of patients with cardiorenal syndrome. Renal vein congestion due to IVC compression is often overlooked but a treatable cause of AKI.

P-45 Educational Team — Is it better to concentrate the opportunity to educate? —

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Background: In our department, a senior resident (SR; PGY3-5) and a junior resident (JR; PGY1-2) pair up to do medical care, during which the SR educates the JR (Yanegawara-style). While this style can offer extensive education, the methods and contents of teaching depend on each attending doctor. So from 2017, we formed a medical team called "Educational Team" with the aims of establishing uniformity in educational content and further teaching SRs "how to teach". Since one year has passed, we report the current status.

Method: One staff physician, one SR, and two PGY1 JRs, were designated as an "Educational Team". The team treated simple cases or patients who offered a chance for JRs to learn a lot. An upper limit of 10 on the number of patients made time for team members to work together. In addition to bedside teaching, regular lectures of basic internal medicine knowledge and simulation-based education were incorporated. The SR learned the educational skills from the staff physician, and feedback was given each time regarding the contents.

Result: After the launch of the "Educational Team", we feel we can do daily medical practice with no problems. In a questionnaire delivered to SRs who experienced the educational team, 4/4 felt that they could learn effective methods of education. The response to the education team was generally good even in the JR questionnaire survey.

Discussion: There is a report that "there is now a move to require all new lecturers in the UK to complete an accredited course in teaching or to have equivalent experience" (Hesketh EA. Med Educ. 2001; 35: 555-64). In Japan, however, opportunities to learn about medical education are very limited especially in younger generations. The "Educational Team" provided our staff with such an opportunity.

Conclusion: Through the "Educational Team", it is shown that the educational skills for medical education can be transferred to SRs.

P-46 Pulmonary Tuberculosis coexisting with Pulmonary Adenocarcinoma

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Introduction:

Pulmonary tuberculosis is known as one of the risk factors of pulmonary carcinoma, and vice versa. One report from Japan, known for relatively high prevalence of tuberculosis among developed countries, revealed that pulmonary tuberculosis coexists in 1-5% of patients with lung cancer. Therefore, we perform tuberculosis test by the specimen obtained by bronchoscope, when suspecting lung cancer in our hospital. In this case, repeated routine test for tuberculosis by bronchoscope lead to timely diagnosis of tuberculosis while investigating lung cancer.

Case Presentation:

A 67-year-old man presented to our hospital with chief complaint of right leg pain and coldness lasting for three days. He was diagnosed as acute arterial embolism and was treated by embolectomy. Chest X-Ray incidentally showed consolidation in mid-to-upper left lung and lung cancer was suspected. Transbronchial biopsy (TBB) revealed lung adenocarcinoma, but the specimen was not sufficient for the analysis of lung cancer gene mutation. The routinely performed test for tuberculosis, including acid fast bacilli (AFB) culture and PCR test of bronchoalveolar lavage (BAL), were negative result. For further evaluation of the gene mutation, we performed bronchoscopic exam again. The second tuberculosis PCR by BAL came out positive. He was diagnosed with pulmonary tuberculosis as well. He was transferred to another hospital for the treatment of tuberculosis.

Discussion:

It has been reported to be difficult to make differential diagnosis between lung cancer and tuberculosis by symptoms or imaging studies. Considering the high prevalence of tuberculosis among lung cancer patients in Japan, we should routinely survey both diseases when suspecting either of the two.

P-47 Can oral vitamin B12 for pernicious anemia replace the conventional treatment?

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Introduction

Pernicious anemia (PA) is an autoimmune gastritis resulting from the destruction of gastric parietal cells and consequent impairment of intrinsic factors secretion to bind the ingested vitamin B12. Although the typical treatment for this is parenteral or intramuscular administration of vitamin B12, the effectiveness of oral vitamin B12 have been reported in several studies and case reports. Here we report our clinical case with PA successfully treated with oral administration of vitamin B12.

Case Description

A 53-year-old man admitted to our hospital with general fatigue and loss of appetite. Blood tests showed pancytopenia and macrocytic anemia (white blood cell count; 2.6x10^3/uL, red blood cell count; 1.28x10^6/uL, hemoglobin; 5.8 g/dL, platelets; 91x10^3/uL, hematocrit; 16.9 %, mean corpuscular volume; 131.8 fL) with low vitamin B12 level (73 pg/mL). His positive intrinsic factor antibody and gastric parietal cell antibody indicated PA. We administrated units of blood transfusion, and started oral vitamin B12 (500 mcg per day) as well as parenterally (1000 mcg per day). The anemia and his clinical symptoms improved gradually. Parenteral administration was stopped on day 7. He discharged from our hospital on day 35, continuing oral vitamin B12 therapy (500 mcg per day). There is no recurrence of anemia in follow-up for 9 month.

Discussion

Vitamin B12 for PA is administrated parenterally or intramuscularly in typical. This treatment is painful and forces patients to visit hospital regularly, which can compromise their quality of lives (QOLs). Some patients who need this treatment for several years are more affected. The efficacy of oral form of vitamin B12 administration for PA has been shown in previous studies. This case also suggests the efficacy of oral vitamin treatment for PA. Considering the QOLs of PA patients, we clinicians should know the efficacy of the treatment.

P-48 Hyperthermia Due to Heat Retention in Chronic Spinal Cord Injury

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Introduction

Thermoregulatory dysfunction is one of the most unusual complications after cervical spinal cord injury (SCI), but it is not familiar with primary physicians.

Case presentation

An 80-year-old male with chronic cervical SCI presented at the Department of General Medicine of our hospital with a fever of an unknown origin. Sixteen days before the evaluation, he was referred to the intensive care unit (ICU) of our hospital owing to perforation in the digestive tract. Five days before the evaluation, his condition improved, and he was transferred to the general ward. One day later, he developed a fever (38•C), which did not resolve despite the administration of acetaminophen and piperacillin/tazobactam.

Upon examination, he was found to be unconscious, with a body temperature of 41.2•C. In addition, his skin was significantly dry with no sweat. The laboratory data revealed only mild hypernatremia. Cultures of the sputum, urine, and blood exhibited no growth. Contrast-enhanced chest and abdominal computed tomography revealed no evidence of infectious lesions. Of note, the room temperature of the ICU was 25•C, whereas that of the general ward was 29•C. Hence, based on chronic cervical SCI and dry skin, we attributed his condition to heat retention and hyperthermia. After controlling the room temperature and performing evaporative and convective cooling, the patient's hyperthermia significantly declined and his unconscious state resolved.

Discussion

In patients with SCI above the T6 level with disrupted autonomic pathways, heat release is rendered impossible because of a decreased sweating response and a compromised cutaneous blood flow, causing difficulty in maintaining a healthy core temperature with respect to environmental temperature changes. This case highlights that in patients with cervical SCI with persistent fever, primary care physicians should consider heat retention as a differential diagnosis.

P-49 How to Communicate More Effectively about Complementary and Alternative Medicine?

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Introduction: Complementary and alternative medicine (CAM) is the term of medical practices or products that are not part of standard care. Some CAM has been found to be ineffective or possibly harmful. However, communication about CAM between patients and physicians are inadequate. We herein present an inpatient case and discuss how to communicate about the use of CAM more effectively.

Case Presentation: A 91-years-old woman with advanced gastric cancer and liver metastasis presented with dyspnea and hospitalized for treating heart failure and pneumonia. Before admission, she lived home with her families and was receiving best supportive care. She was taking many supplements such as propolis and Coenzyme Q10. After her symptoms improved, her families and our team planned to refer her to a hospice. During discharge planning, her son asked us whether the patient can take a high-dose vitamin C therapy or not. He said he wants her to try CAM to aim for a complete cure. We just told him that the patient couldn't take a high-dose vitamin C therapy because it's not available at a hospice. He decided to refer the patients to a hospice. However, he didn't seem satisfied with our communication.

Reflection and Discussion: We reflect this case and find two important points. At first, we didn't take this communication seriously, so we didn't explore details of what her son wanted. Second, we simply didn't know much about CAM. According to the interview survey, about half of cancer patients take CAM, however, many patients don't talk with a doctor about CAM, and don't know enough information of C. On the other hand, about 90% doctors don't know much about CAM. There are many evidence-based guidebooks available, and it may improve understanding of CAM. In conclusion, physicians should ask the use of CAM and actively discuss based on accurate information to improve patient's satisfaction.

P-50 Retrospective study comparing cefmetazole with carbapenems for treatment of ESBL-producing enterobacteriaceae bacteremia.

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Background: There are limited treatment options for ESBL-producing enterobacteriaceae (ESBL-E) so resistance to carbapenems (CPs) is a significant concern. Cephamycins, such as cefmetazole (CMZ) are effective against ESBL-E in vitro and against urinary tract infections. They are also assumed to be effective in bacteremia but evidence is limited to retrospective case series. This study compares CMZ with CPs to treat ESBL-E bacteremia in a single hospital setting.

Methods: We conducted a retrospective observational study at Teine Keijinkai Hospital, a 670 bed tertiary hospital in Sapporo, Japan. All patients hospitalized from November 2012 through October 2017 who had ESBL-E bacteremia (n=85) were identified, and those who were treated with CPs or CMZ were reviewed. Pediatric patients, those lost to follow up, and patients treated with other antibiotics were excluded. The following data were collected from the clinical record: Age, gender, Charlson Co-morbidity Index (CCI), Pittsburgh Bacteremia Score (PBS), bacterial profile. The primary outcome was death within 30 days after the detection of bacteremia. Statistical analysis was performed using SPSS and the Mann-Whitney test to compare the two groups.

Results: Sixty-three cases met criteria for this analysis. The most common causative organism was Escherichia coli (85.7%). Both CP (n=42) and CMZ (n=21) treatment groups had equivalent PBS severity scores (1.63 ±1.95 vs 1.84 ±2.05 p=0.116). There was no significant difference in either death within 30 days (p=0.261) and the other measured comparisons.

Conclusion: In this study, cefmetazole seems to have equivalent 30-day survival to carbapenems for treatment of ESBL-E bacteremia, in concordance with prior studies. Confirmatory prospective trials are now required.

P-51 Pylephlebitis: A Rare Complication of Diverticulitis

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Introduction

Pylephlebitis is rare and fatal complication of the common intraabdominal infection and requires early diagnosis and treatment. We report a case of diverticulitis complicated with pylephlebtis.

Case presentation

A 56-year-old otherwise healthy male was admitted to our hospital following 7 days of fever with rigor and progressive jaundice. Physical examination revealed marked skin jaundice with icteric conjunctiva but the abdomen was soft without any tenderness. Laboratory test results were as follows: white cell count, 14,000/mm3; C-reactive protein, 16.7 mg/dL; and total bilirubin, 15.6 mg/dL. Two sets of blood culture yielded Clostridium spp. Contrast-enhanced abdominal computed tomography (CT) revealed extensive gas with thrombosis in the inferior mesenteric vein and gas in the hepatic portal vein, as well as sigmoid diverticulitis. Piperacillin-tazobactam was administered with intravenous low-molecular-weight heparin, but the latter was discontinued on hospital day 4 due to the development of intramuscular hematoma of the psoas major muscle. After the administration of antibiotics, the patient's fever and jaundice gradually resolved, and he was discharged on hospital day 19. After discharge, he was switched to oral levofloxacin and metronidazole for 6 weeks.

Discussion

Pylephlebitis is a rare, severe condition with high morbidity and mortality, which can complicate any intraabdominal sepsis. The most common causative infections are diverticulitis and appendicitis. Abdominal pain and fever are the most common presenting symptoms, but jaundice is unusual. A CT scan is useful for early diagnosis and therapy. However, the diagnosis is frequently delayed because pylephlebitis is rare condition and its symptoms are nonspecific. Because a delay in diagnosis and treatment can lead to complications such as bowel infarction, clinicians need to consider pylephlebitis as one of the differential diagnoses.

P-52 One sporadic CJD with rapidly progressive mental deterioration as the first presentation

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[Introduction]

Creutzfeldt Jacob disease (CJD) is a rare neurodegenerative disease that has rapidly progressive mental deterioration and myoclonus. About only 100 cases are reported in Japan every year. We experience one sporadic CJD with rapidly progressive mental deterioration as the first presentation

[Case presentation]

The case is a 72 year-old man, who had aseptic meningitis one year before the admission day, with rapidly progressive mental deterioration within one and half month. On the admission day, he had difficulty in walking and pathological reflection was seen. Deep tendon reflex was exaggerated. Scattered areas of T2 and FLAIR signal hyper-intensity are seen in the cerebral cortex in MRI imaging. We suspected CJD from the clinical features and the MRI image. 14-3-3 protein was detected in his spinal fluid and abnormal prion was detected with RT-QUIC methods. The PRNP genotype was homozygous for methionine at codon 129 and we diagnosed him as sporadic CJD. After the admission, myoclonus and startle phenomenon was observed and periodic synchronous sharp wave complexes could be seen in the second electroencephalogram (EEG). The tonic-clonic convulsions appeared and he could not eat anything. He was transferred to a different hospital with the intravenous drip.

[Discussion]

We experienced one sporadic CJD with rapidly progressive mental deterioration as the first presentation. Our hospital had four CJD cases including it in seven years and the symptoms progressed inexorably once they appear. We could not diagnose it properly at their first visits in every case. Once we see rapidly progressive mental deterioration or involuntary movements, we should suspect CJD and take MRI images and EEG.

P-53 A patient of pulmonary cryptococcosis who presented with severe chest pain

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Introduction: Cryptococcosis is a granulomatous fungal infection that commonly manifests as meningitis. Since pulmonary cryptococcosis is relatively rare and causes nonspecific symptoms, it might be difficult to make its diagnosis. Here, we present a case of pulmonary cryptococcosis that presented only with severe chest pain.

Case Description: A 62-year-old man with hypertension presented with acute onset of severe chest pain over the past three hours. The pain became worse when he had deep inspiration. He had no cold sweat, nausea, or other respiratory symptoms. There was no family history of cardiovascular or respiratory diseases. He had no animal contact nor sexual history. On examination, he was ill-appearing and his vital signs were normal. Late inspiratory crackles were audible over the bilateral lower lung fields. There were no signs of meningeal irritation. An ECG was normal. In blood test results, peripheral WBC count was elevated at 10,500/μL. Troponin I and d-dimer levels were normal. Chest radiography showed consolidation in left lower lung field and chest CT scan revealed multiple pulmonary nodules in the left lower lobe. Bronchoscopy was performed, showing fungi with positive India ink staining. Microscopic findings of a specimen by TBLB showed granulomatous inflammation with multiple yeasts. Serum cryptococcal antigen was also elevated. Lumbar puncture revealed the normal result. Antibodies against HIV and HTLV-1 were negative. Based on these findings, a diagnosis of pulmonary cryptococcosis was made. Fluconazole was administered, and the chest pain had improved.

Discussion: Symptoms in pulmonary cryptococcosis are variable and these may be influenced by immune status. In immunocompetent patients with this disease, severe chest pain has been rare, and, to our knowledge, there have been no reports with such case mimicking cardiovascular diseases. The differential diagnosis for rare cases causing chest pain may need to include pulmonary cryptococcosis.

P-54 A case of hereditary spherocytosis with no family history

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Introduction

Hereditary spherocytosis (HS) is the most common congenital hemolytic anemia; autosomal dominant inheritance occur in approximately 75 % of patients, with recessive inheritance in most of the remaining. HS contains the word “hereditary”, but most of HS patients have no family history.

Case description

An 17-years-old half American and half Japanese man was admitted to our hospital with fever for four days. He had noticed jaundice when he was sick such as fever or insufficient sleep since a child. A blood test of the medical examination was normal at about 10 years old, and had not been run since then. There were no familiy history of blood disorders and cholelithiasis, and his parents were normal in the medical examination. His father was Irish American descended from Italian and French. On examination, the temperature was 37.6℃, the blood pressure was 114/65 mmHg, the pulse was 112 beats per minute. He had jaundice and splenomegaly. Abdominal ultrasound showed biliary sludge. The Blood test revealed spherocytosis with hemolytic anemia; ID-BiL 6.2 mg/dl, LDH 285 IU/l, RBC count of 208/μl, Hb 6.6 g/dl, MCV 86.5 fl, MCHC 36.7 g/dl, Haptoglobin 58 mg/dl. Coombs test was negative, and red blood cell osmotic fragility test was positive. He was diagnosed with HS. Fever and hemolytic anemia resolved in one week follow-up.

Discussion

He had no family history of HS. A significant number of patients with hematologically normal parents prove to harbor de novo mutations that will exhibit dominant inheritance in subsequent generations. Also, the inheritance pattern of sever HS is almost always recessive, and the parents of an affected patient are usually asymptomatic. The case emphasizes the importance of suspecting HS regardless of no family history.

P-56 A case of brainstem encephalitis presenting with fever, dysuria, and hiccups and diagnosed on day 5 of hospitalization

Tsunenori Tamai [a] *[Other Doctors]*

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Introduction

In meningitis or encephalitis, it is typical to present headache or cerebral dysfunction as a symptom other than fever.

We are reporting one case of encephalitis which took longer than usual to diagnose because it lacked symptoms such as headache or cerebral dysfunction at the onset.

Case presentation

The patient was a 48-year-old man who had recently developed difficulty in passing urine and had a persistent fever since November 12 . He had difficulty in walking on November 17, and he thus was brought to the hospital by an ambulance. His bladder was distended, and a bladder catheter was then put in place. We suspected that the patient had acute pyelonephritis with dysuria; therefore, treatment with antibiotics was started. His fever persisted, and he developed persistent hiccups on November 18 and disturbance of consciousness on November 21. A lumbar puncture was subsequently performed and CSF analysis showed an elevated cell count and increased protein levels. We started to treat him with acyclovir and steroid therapy. The fever and disturbance of consciousness temporarily improved during steroid pulse therapy but worsened again. As a result, he was then treated with steroid pulse therapy again, and was treated CTRX and ABPC on November 28. On November 29, he developed apnea. Therefore, he was intubated and put on an artificial respirator. Thereafter, his symptoms gradually improved, and he was extubated on December 13. He was discharged on January 30.

Discussion

In this case, the patient did not have any headache or apparent disturbance of consciousness until day 4 of admission, we could not promptly make a diagnosis. Dysuria, and hiccups are kinds of brainstem symptoms. Since this patient presented with dysuria and hiccups at admission, we should have suspected that he had a central nervous system disorder and proceeded to diagnose him with brainstem encephalitis earlier.

P-57 Decade-long undiagnosed orthostatic hypotension: snap diagnosis in primary care

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Introduction

Pure autonomic failure (PAF) is one of the synucleinopathies causing neurogenic orthostatic hypotension. It is a degenerative disease without impairment of movement and cognitive function. Therefore, patients with this disease are likely to see primary care physicians first. It is a rare disease, but the diagnosis can be easily made if the characteristic history, long-term episodes o of orthostatic hypotension, is obtained. The purpose of this case report is to introduce a typical case presentation which can remind primary care physicians of this disease as a differential diagnosis.

Case Presentation

A 76 year-old man presented to our outpatient department with a chief complaint of syncope of 1 year duration. He noticed palpitation and general malaise while standing 12 years earlier, but they began to occur even while sitting 6 years earlier. His symptoms were relieved by a supine positing, crossing legs, and sitting on the knees “seiza”. He also had the symptoms of autonomic nerve dysfunction such as constipation, dysuria, hypohidrosis, and early satiety, but did not have paralysis, numbness, weakness, tremor, and hallucination. On an attempt to test orthostatic blood pressure change, he developed syncope. He had no extra-pyramidal tract abnormality, cerebellar ataxia, and cognitive impairment. Secondary causes of neurogenic orthostatic hypotension were almost excluded with his decade-long history of the symptoms, and the results of further work-up were not compatible with the secondary causes. The diagnosis of PAF was made.

Discussion

PAF can be a snap diagnosis in primary care settings when the orthostatic hypotension lasts many years and remains undiagnosed. A close follow-up even after the diagnosis is required since 80% of PAF cases are reported to develop other synucleinopathies such as Parkinson’s disease.

P-58 Predictive value of atrial fibrillation recurrence post catheter ablation (CA). A proposed new clinical prediction tool: the LAMP score

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Background: Catheter ablation (CA) for AF has a high complication rate (5.2%) and approximately 40% of patients have recurrent AF after an initial CA treatment session. To date, no clinical tool has been developed to help predict recurrence.

We performed a retrospective derivation study of 192 patients with AF and collected patient demographic and echo data.

Measurements: Recurrence was defined as documented AF by ECG or Holter monitor after a blanking period of three months. We used a coefficient-based multivariable logistic regression scoring method with internal validation to formulate a prediction score.

Results: Of 138 patients included in the analysis, 35.5% had AF recurrence and were divided into derivation and validation sets. The following characteristics were found to be significant using the derivation process: Left atrial diameter > 43.3mm, use of Anti-arrhythmic drugs before CA, moderate to severe Mitral regurgitation and Persistent AF. Combining the initial letters of each characteristic, we named our prediction rule as the LAMP score. To derive this risk score, integer-based scores were assigned and summed. In the validation data sets, recurrence rate in patients from the first to third risk-score quartile were 13.3%, 40.0% and 71.4%, respectively. Further, the likelihood ratio (LR) in the high-risk category was 20.9.

Limitations: Further investigation is necessary to validate our rule in other populations. This rule has limited ability to screen for recurrence in the low-risk group, with a LR of only 1.08.

Conclusions: We developed a prediction rule for the identification of AF recurrence based on patient history and echocardiogram alone. This LAMP score may be used for prediction of AF recurrence after an initial CA treatment session.

P-59 Rapid Onset Generalized Edema in an Adult Patient with Parvovirus B19 Infection

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Introduction

Several case reports showed the rare complication of parvovirus B19 infection, as generalized edema in adults. But its pathophysiology is still unknown. We report a case with rapid onset generalized edema with parvovirus B19 infection and discuss its possible causative factors.

Case Presentation

A previously healthy 36-year-old woman presented to our hospital because of a two-days-history of severe arthralgia, symmetrical peripheral edema with erythema, and fever. Two weeks earlier, she also had fatigue, chills, and fever, which subsided spontaneously. Physical examination showed bilateral peripheral non-pitting edema with blanching lace-like erythema. We diagnosed her with viral arthritis with parvovirus B19 and gave her ibuprofen 200mg as needed for arthralgia. A week later, she presented with progressive generalized edema, shortness of breath with exertion, decreased and dark colored urination, and weight gain of 8.3 kg. Vital signs were unremarkable except for mild increase in respiratory rate. Generalized pitting edema and forced expiratory wheezes at her neck were observed. We admitted her for the further investigation. Serologically, parvovirus B19 infection was confirmed. Serum electrolytes, osmolarity, creatinine, and eGFR were all normal. NT-proBNP was 973 pg/ml. ANA titer was 40. CH50 was less than 12.0/mL. Ulynalisis showed no hematuria or proteinuria. Repetitive ECGs, cardiac enzymes, and echocardiographies showed IVC dilation without collapse but no signs of myocarditis or pericarditis. Chest CT with contrast showed bilateral pleural effusion and excluded pulmonary embolism. A short course of diuretics improved her condition.

Discussion

Generalized edema with parvovirus B19 infection might be explained by two-step theory. The first is increased capillary permeability by type III allergy and the second is sodium retention by RAA system activation. We also need to consider other aggravative factors, such as undiagnosed SLE or NSAID use.

P-60 Hypocalcemia in Osteoblastic Metastasis from Gastric Carcinoma

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Introduction:

In general, bone metastasis may produce osteolytic change, osteoblastic or both. Prostate, lung and breast carcinomas often show osteoblastic metastasis. On the other hand, carcinomas of other origins usually provide osteolytic metastasis. Gastric carcinoma rarely shows bone metastasis and uncommonly provides osteoblastic metastasis. Hypercalcemia occurs in 30% of advanced stage of cancer patients. In contrast, paraneoplastic hypocalcemia is very rare condition. We report an unusual case of hypocalcemia in osteoblastic metastasis from gastric carcinoma.

Case:

A 88-year-old man was referred for general malaise, loss of appetite and weight loss experienced over 6 month period. On examination of the patient, the blood pressure was 120/82mmHg, the pulse 75 per minute, the temperature was 36.4℃. The laboratory data showed anemia (Hb 7.0 g/dl), LDH and ALP were elevated to 633 IU/L and 4,461 IU/ L. Hypocalcemia of 5.6 mg/dL was also noted, and the corrected calcium value was 7 mg/dL by the correction formula applying 2.3 g/dL of serum albumin. Additional date showed normal 1,25-(OH)2-vitaminD(35.1 PG/ml) and elevated intact-PTH 338 pg/ml. A CT scan revealed disseminated osteoblastic change throughout cervical-thoracic- lumbar spine. Esophagogastroduodenoscopy (EGD) showed the gastric wall thickening and the large ulcer in greater curvature and pylorus. Biopsy results revealed Adenocarcinoma group . Thoracolumbar MRI showed diffuse low intensity signal in T1 and T2. These findings indicated the presence of gastric adenocarcinoma with osteoblastic metastasis.

Discussion:

Osteoblastic metastases from gastric cancer have been reported only in 12 cases from 1977. Although the mechanism of hypocalcemia needs to be investigated, we experienced a case of hypocalcemia in osteoblastic metastasis from gastric carcinoma

P-61 Stroke as an initial presentation of pulmonary arteriovenous malformation

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[Introduction]

Pulmonary arteriovenous malformation (PAVM) is a rare disease that may cause dyspnea and hemoptysis as an initial presentation. We report a case of an otherwise healthy middle-aged woman presenting with sudden hemiparalysis and altered consciousness, who is later found to have a stroke caused by PAVM.

[Case presentation]

A previously healthy 58-year-old woman presented with altered consciousness preceding sudden tachypnea 30 minutes after sexual intercourse. Physical examination showed blood pressure 150/80 mmHg, heart rate 98 per minutes, respiratory rate 24 and afebrile, left hemiparalysis, right spatial neglect, and altered mental status (Glasgow Coma Scale E3V2M5).

The laboratory test was normal except for lactic acidosis. Brain computed tomography (CT) and MRI revealed no sign of stroke. The initial working diagnosis was seizure with Todd's palsy.

Second day after admission, consciousness level recovered to normal but her hemiparalysis persisted. Repeat MRI demonstrated multi-focal non-lacunar cerebral cortex infraction in the right parietal and occipital lobe.

The source of embolic stroke was investigated; coagulopathy, antiphospholipid antibody syndrome, atrial fibrillation, vasculitis, atherosclerosis, and echocardiograms were all negative. Whole body CT revealed a small PAVM (feeding artery with 2mm in diameter) located in the left lower lobe. We diagnosed embolic stroke due to PAVM. The patient was then scheduled for embolization.

[Discussion]

Even though about one-third of PAVM has neurological complications, stroke is rare as an initial presentation. It is important to evaluate the potential etiology of stroke thoroughly before diagnosing Embolic Stroke of Unknown Source (ESUS), especially with patients who have no cardiovascular risk factors.

P-62 Unrecognized clue: Crystals in the urine in acyclovir-induced renal toxicity.

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INTRODUCTION

Acyclovir is well-known cause of acute kidney injury, especially unless sufficient hydration was performed. We report a case in which urinary crystals by polarizing microscopy immediately recalled acyclovir-associated renal injury and adequate IV hydration could induce early recovery of renal function.

CASE DESCRIPTION

A 34-year-old man was admitted with 2 days history of fever, headache, nausea, and severe nuchal pain (day1). On examination, he was alert and oriented. The temperature was 38.6℃, pulse 77 beats/min, blood pressure 126/83 mmHg, and the respiratory rate 16 breaths/min. Meningeal sign was positive for stiff neck, and neck flexion test. Vesicular rash appeared on his right chest wall. Blood test revealed for WBC 6870/μl, CRP 0.01 mg/dl, glucose 119 mg/dl, BUN 18 mg/dl, creatinine 0.9 mg/dl. CSF analysis showed for WBC 1062/μL (Neutrophil 1057, Lymph 4), protein 18.6 mg/dl, and glucose 62 mg/dl. Head MRI revealed no significant findings. Herpes zoster and subsequent meningitis were suspected and intravenous acyclovir 500 mg q8h was initiated with 250 ml of normal saline. Initially he had bland urine sediment, but on day 7 his creatinine had elevated to 4.07 mg/dl and developed aseptic pyuria. Interstitial nephritis was suspected, and acyclovir dose was reduced to q12h. Examination of urinary sediment by bipolarizing microscopy showed bifringent needle-shaped crystals, which suggested acyclovir-associated renal injury. After 10 days course of acyclovir therapy with adequate IV hydration, he was fully recovered from meningitis as well as renal impairment.

DISCUSSION

Adequate IV hydration is important for the prevention of acyclovir-associated renal injury. Acyclovir crystals in the urine by bipolarizing microscopy can be a useful diagnostic clue when renal impairment developed.

P-63 A case of posterior reversible encephalopathy syndrome occurred after rapid correction of severe chronic anemia

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Introduction

Posterior reversible encephalopathy syndrome(PRES) is a clinico-radiological syndrome characterized by symptoms of headache, seizures and altered consciousness. Multiple factors such as hypertension, medications and others have been reported as causes of PRES, rapid correction of severe chronic anemia is one of the risks of PRES.

Case Presentation

A 51-year-old female was brought to our hospital with an episode of generalized convulsive seizure after headache and disturbance of consciousness. Her past history was significant with iron deficiency anemia for 7 years, and 2 months prior to admission, she was treated by iron and blood transfusion for advanced anemia with a Hb level of 3.6 g/dL. She developed status epilepticus. While the convulsions settled after infusion of anticonvulsant and her consciousness were immediately improved. The cerebrospinal fluid was normal. Brain MRI of T2/FLAIR, ADC maps showed multifocal hyperintensities in the bilateral occipital, cerebellum cortex, suggestive of PRES. She was discharged with no symptoms one week after. 6 weeks after the initial MRI, the MRI abnormalities were disappeared. We diagnosed as PRES occurred after rapid correction of severe chronic anemia.

Discussion

PRES is characterized by the image of vasogenic edema. Although the mechanisms are unknown, rapid correction of severe chronic anemia among adult women similar to this case has been reported. No case has not been reported with rapid correction of severe anemia. Thus, we need to take severe chronic anemia correction carefully.

P-64 Prospective cohort study of the impact of counseling about artificial hydration and nutrition(AHN) for the elderly who cannot get enough oral intake

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Background

In our super-aging society, numerous number of elderly are evaluated as being unable to get enough oral intake despite maximized medical intervention. AHN can provide fluid and nutrition which may result in better nutritional status or prognosis. On the other hand, the downside of AHN should be discussed which are often taken lightly.

Purpose

To evaluate the impact of detailed and precise counseling about AHN

Methods

We enrolled patients over 65-year-old with the principal diagnosis of aspiration pneumonia who were hospitalized to Takatsuki General Hospital (TGH) from September 2017 to February 2018. Speech therapists evaluated them and those whose dysphagia are too severe to get enough oral intake despite maximized medical intervention were registered (post-intervention group). Physicians counseled patients and their family about AHN based on current guidelines. We evaluated the initiation rate of AHN, comparing to similar population who were hospitalized to TGH from September 2016 to February 2017 (pre-intervention group).

Results

Twenty two patients were included in the pre-intervention group, and 10 were started on AHN. Ten patients were included in the post-intervention group, and only one patient chose AHN. Although it was not statistically significant, there was a tendency of less AHN initiation in post-intervention group (odds ratio, 7.1; 95% CI, 0.748-360). Post counseling questionnaires revealed positive impression about the counseling.

Conclusion

The counseling about AHN may have a positive impact on reducing futile AHN initiation. Detailed and precise explanation may reflect the preference of patients and their family, resulting in limitation of AHN only for those who truly wish.

P-65 Isolated ACTH deficiency Presenting Fatigue, Anorexia, Weight loss, and Hyponatremia

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Introduction

Isolated adrenocorticotropic hormone (ACTH) deficiency (IAD) is a disorder characterized by low plasma ACTH levels resulting in secondary adrenal insufficiency. Despite the condition can be life threatening if not treated properly, diagnosis is challenging for its unspecific symptoms. We report a case of IAD, and discuss the clinical differences between primary and secondary adrenal insufficiency.

Case Presentation

A 73-year-old man who retired from a tile craftsman 8 years ago had experienced fatigue for the past 9 months, gradually lost appetite, lost weight, and found it difficult to wake up and walk 3 days before the presentation. He went to a local clinic, his serum natrium level was 125 mEq/L, so he was referred to our hospital. On the presentation, his height was 162 cm, body weight was 44 kg, temperature was 36.2℃, blood pressure was 96/58 mmHg, pulse late was 66 bpm. Physical examination was unremarkable. ECG, CXR, dynamic CT were unremarkable. Laboratory study showed normal CBC, renal function, hepatic function, and CRP. Serum natrium level was 121 mEq/L, blood glucose was 71 mg/dL, and so we suspected adrenal insufficiency. ACTH was 14.8 pg/mL, cortisol was 0.2 μg/dL. Head MRI revealed an atrophy of the pituitary gland. CRH, GRH, TRH, LHRH stimulation test was performed, which revealed no ACTH and cortisol stimulation. We performed ACTH stimulation test, and cortisol was stimulated. The diagnosis was Isolated ACTH deficiency. He was treated with hydrocortisone, discharged from the hospital 25 days after the presentation.

Discussion

IAD is a major cause of secondary adrenal insufficiency, which includes weakness, fatigue, anorexia, weight loss, and psychiatric disorders. Hypoglycemia and hyponatremia are common. It can be distinguished from primary adrenal insufficiency by the absence of hyperpigmentation, dehydration, gastrointestinal symptoms, and hyperkalemia.

P-66 Spontaneous Isolated Superior Mesenteric Arterial Dissection Presenting Sudden Onset and Prolonged Epigastric Pain with Normal Laboratory Findings

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Spontaneous isolated superior mesenteric arterial (SMA) dissection is a disease, which is almost benign but sometimes causes severe complication including intestinal gangrene. Almost all of the patients present with epigastric pain, but the specific diagnosis is initially challenging because of the rarity of the disease. Here we report a case with sudden onset and prolonged epigastric pain with normal laboratory findings.

A 34-year-old previously healthy man was presented our emergency room with a history of epigastric pain and back pain. The patient could not remain still due to the pain with blood pressure of 158/80mmHg, pulse of 98beats per minute, respiratory rate of 22breaths per minutes. Physical examination revealed epigastric tenderness without defense. Initial laboratory test including blood blood counts, metabolic panel, liver function test, and D-dimer were within normal range. We performed contrast-enhanced CT to assess arterial dissection, thrombosis and embolism, which are major and fatal causes of a sudden onset and severe upper abdominal pain. The enhanced CT showed wall enhancement of intestine and no arterial thrombosis, embolism and sign of intestinal ischemia. The pain gradually improved. Esophagogastroduodenoscopy performed on day2 was normal. The contrast-enhanced CT, which was reviewed for second look with radiologist, revealed a tiny dissection of SMA. Consequently, abdominal duplex ultrasonography clearly identified closed false lumen. There was no recurrence of abdominal pain. The patient discharged from our hospital on hospital day3.

Although mortality for all patients of spontaneous SMA dissection is low, some cases get severe and require intervention. In our case, although the dissection was difficult to identified initially because of the rarity, we finally identified the dissection in the second look of the CT. Physicians should know about this disease and should rule in the diagnosis when we see the severe epigastric pain.

P-67 A case of diabetic ketoacisosis complicated by severe combined dyslipidemia in a patient on a low-carbohydrate diet.

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Introduction

Low-carbohydrate diet is an effective method for treating obese diabetic patient. However, there is a possible concern that diabetic ketoacidosis (DKA) develops when a patient with insulin deficiency conducts carbohydrate restriction.

Case Presentation

A 44-year-old man was admitted to our hospital because of DKA. He was diagnosed with diabetes 6 years before admission. Two years before admission, he was admitted to a hospital and started an extreme low-carbohydrate diet with oral hypoglycemic agents. Two months before admission, his glucose control worsened. Although anti-GAD antibody was positive, insulin therapy was not started. Two days before admission, upper abdominal pain and general malaise appeared, followed by consciousness disturbance. On examination, height was 163 cm, weight was 48.8 kg. Consciousness was II-20 in JCS. Blood pressure was 139/75 mmHg, and pulse rate was 110/min. Respiration rate was 19/min. There were no abnormalities in the chest and abdomen. Laboratory tests showed high blood glucose (931 mg/dL) and high anion gap metabolic acidosis. His total, LDL, HDL cholesterol and triglyceride levels were 476, 348, 62 and 329 mg/dL respectively. He was treated with intravenous administration of insulin and saline. Temporarily after recovery, he refused to take carbohydrate and insulin injection. Serum lipids improved to LDL-C 200 mg / dL and TG 143 mg / dL at the discharge.

Discussion

In this case, positive anti-GAD antibody meets the diagnostic criteria for slowly progressive type 1 diabetes. DKA probably resulted from extreme low-carb diet in insulin deficient state. This patient did not satisfy the diagnostic criteria for familial hypercholesterolemia. As the lipid levels improved during hospitalization, it was speculated that the effect of replacing the dietary carbohydrate with animal fat.

P-68 A patient of Myotonic Dystrophy with type 2 Diabetes Mellitus by telemedicine

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Introduction

Myotonic dystrophy (MD) is multisystemic, autosomal dominant disorder associated with progressive muscle wasting and weakness, and generally complicated by diabetes Mellitus (DM). Insulin resistance and hyperinsulinemia considered severe metabolic abnormalities also able to induce DM. It is a problem how to control glucose level in MD patients with DM without the physical exercise.

Case Presentation

A 49-year-old man with MD gradually progressed muscle weakness. Last year, it was a burden on him to go to the clinic by walking and to wait. His HbA1c was varied from 7.9% to 8.9%, because of his poor adherence. He might go to my office once per 4 weeks, which was difficult to be treated DM at my office. Therefore, I alternately introduced his telemedical treatment and the conventional one, each 3-4 week, in order to relieve his work load such as his walking to the office and keeping the position at the office. After the telemedicine, his HbA1c was improved from 7.4% to 6.2% for almost seven months.

Discussion

The problems to treat him was that he lost the motivation on DM because of MD, and that his clinical stage existed between the home health care and the conventional treatment. The telemedicine should be needed to keep the intractable disease.