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 \text{ \%} in room air and body temperature was 36.1{\degree}C. General physical findings were not significant, but neurological examination showed symmetrical hyperreflexia of the arms and legs. Blood test revealed hyperammonemia (117 \mu g/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.