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.