

The patient with HLA-B27 positive uveitis diagnosed as Right fronto-temporal lobe hemorrhage



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INTRODUCTION

Human leukocyte antigen B27 (HLA-B27) is associated with several rheumatic diseases, including ankylosing spondylitis, acute anterior uveitis, and reactive arthritis. The frequency of HLA-B27 positivity varies by race. In a frequency study of Korean healthy adults conducted in 2012, 4.6% (5.0% of males and 1.6% of females) were HLA-B27 positive.

Here, we report a case in which a 43-year-old woman with **recurrent uveitis** who visited the emergency room due to mental change and weakness on her left side. She was diagnosed with **hemorrhage of right fronto-temporal lobe** using CT (Computed tomography). (Figure 1)

CASE

On December 19, 2022, a 43-year-old woman with a **history of recurrent uveitis** was found lying on the floor of her house. She was diagnosed with **hemorrhage in her right fronto-temporal lobe** using **CT**.

The patient had a complex medical history, including a history of **high-dose steroid for recurrent uveitis**, total hip arthroplasty 15 years ago for avascular necrosis of the femoral heads, and pin fixation surgery for a right calcaneal fracture in May 2022. She was also diagnosed with severe osteoporosis.

Upon admission to the department of neurosurgery, the patient underwent manual muscle tests which showed good ratings in her left upper extremities and fair plus to good rating in her right lower extremities.

Screening tests for recurrent uveitis revealed that she was **positive for HLA-B27**. However, **no abnormal findings were found on the pelvis CT (Figure 2) or spine X-ray (Figure 3)**.

The department of rheumatology recommended outpatient follow-up as there was **no inflammatory back pain and no abnormal CT findings**.



Figure 1. Brain Computed Tomography(CT) performed on initial emergency room visit : Hyperdense intracranial hemorrhage in right Fronto-Temporal lobe, with perilesional edema

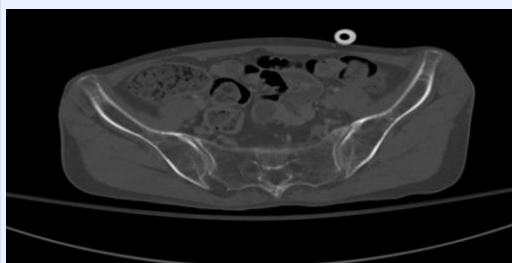


Figure 2. Pelvic Bone Computed Tomography(CT), No evidence of sacroiliitis (January 2, 2023)



Figure 3. Lumbo-Sacral spine X-ray, No evidence of bamboo spine (January 12, 2023)

CONCLUSION

This patient suffered from **recurrent uveitis**, and tested **positive for HLA-B27**. **Although radiography cannot detect the progression of ankylosing spondylitis, continuous follow-up of symptoms and imaging is necessary.**

In a 2022 Cohort study, it was found that **uveitis is an important risk factor for stroke in patients with ankylosing spondylitis**. Furthermore, **long term high-dose steroid therapy may cause hypertension**, which may have contributed to the development of intracranial hemorrhage.

Therefore, **patients with recurrent uveitis should be screened for ankylosing spondylitis**. Additionally, ankylosing spondylitis patients with recurrent uveitis should **monitor their blood pressure closely while using high-dose steroids** and should seek early detection of stroke if they experience any neurological signs and symptoms.