

中文題目：眼框蜂窩性組織炎併發腦膜炎及腦膿瘍

英文題目：Orbital Cellulitis Complicated with Meningitis and Brain Abscesses

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### **Introduction:**

Orbital cellulites is an uncommon disease and may be associated with significant visual and life-threatening sequelae, including optic neuropathy, encephal meningitis, cavernous sinus thrombosis, sepsis, and intracranial abscess formation. Early diagnosis and aggressive treatment with broad-spectrum antibiotics and surgical intervention may decrease occurrence of serious complications, such as vision loss, intracranial infection and death.

### **Case presentation:**

A 77-year-old woman with type 2 DM under metformin 500 mg and Glibenclamide 5mg, BID control for more than 20 years was admitted to our hospital due to fever and drowsy consciousness for one day. She ever caught a cold with rhinorrhea and nasal congestion 15 days before admission. She received some antihistamine, but nasal congestion and headache on and off were still noted. Three days before admission, fever and drowsy consciousness occurred and she was sent to local hospital. At there, urinary tract infection was noted and antibiotics as cefazolin and gentamicin were used. Due to her conscious level decline to coma, she was transferred to our hospital. Brain computed tomography showed no ICH nor organic lesion. Lumbar puncture revealed elevation of WBC count (1024/cumm) with PMN predominant (94%), low glucose ( 26mg/dl) and high protein ( 375 mg/dl). Under the suspicion of bacterial meningitis, antibiotics as Vancomycin and Ceftriaxone were infused. Three days later, redness swelling with local heat over right eyelids occurred and orbital computed tomography with contrast disclosed right optic neuritis and multifocal abscesses at the right orbit, and temporal lobe and ethmoid sinus. Then orbital exploration with drainage and endoscopic surgical drainage of ethmoid sinus was done. Pus culture showed methicillin-resistant S.aureus infection. Antibiotics as Vancomycin was used for 14 days and the patient received another 14 days course of oral Fulcidin after discharge. However visual loss of her right eye was noted after treatment.

**Conclusion:**

Orbital cellulitis is an uncommon infection that is associated with multiple serious complications that may lead to permanent sequelae if there is not timely and adequate treatment. Thus, when a patient presents with ocular pain, eyelid swelling with erythema, limited eye movements, proptosis, and ophthalmoplegia with diplopia, imaging with contrast enhanced CT and appropriate systemic antibiotic treatment should be given rapidly, and aggressive surgical debridement and drainage should be performed if there is an abscess.