

## Ophthalmoplegia as unusual initial symptom of Hodgkins lymphoma

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### **Abstract**

Hodgkins lymphoma are relatively common tumors in the neck and head and should always be considered in the differential diagnosis of any mass lesion in this region, especially in cases with single enlarged lymph node of unknown origin and symptoms that can only be explained by metastasis. In the present case, a 58-year-old man who was found to have a Hodgkins lymphoma in his neck that was complicated by a metastasis to his brain causing complete ophthalmoplegia, a rare primary complication.

### **Introduction**

Hodgkins lymphoma is a group of malignant tumors characterized by Reed-Sternberg cells in an appropriate reactive cellular background, an important clinical features is its tendency to arise within lymph node areas [1]. It has a bimodal age distribution with one peak in the 20s and 30s, and a second peak over the age of 50s, enlarged lymph nodes in the head and neck region are relatively frequent clinical findings and can be of either inflammatory or neoplastic origin [2]. Several rare paraneoplastic neurologic syndrome have been described, these include chorea, neuromyotonia, subacute sensory neuropathy, subacute lower motor neuropathy [3,4].

### **Case presentation**

A 56 year-old- man presented with a history of progressive double vision and had experienced left ptosis, associated with moderate to severe ocular and periocular pain over two weeks duration. His condition not associated with proptosis, conjunctival injection, facial weakness, hearing loss, dysphagia or dysarthria. There was history of heavy smoking since 30 years ago, hypertension for 10 years and diabetes mellitus type two for 6 years ago.

Clinical examination revealed left sided complete ophthalmoplegia (complete ptosis, mydriasis, all extra ocular muscle palsy) with hypoesthesia of ophthalmic branch of trigeminal nerve. Other neurological examination including cranial nerves, conscious level, mental state, speech, meningism, upper and lower limbs was normal. Vital signs and other medical chest and abdominal examination also were normal.

Investigation of complete blood count, liver function tests, renal function tests, and electrolytes was normal with slight raised of erythrocyte sedimentation rate. Chest X-ray and abdominal U/S was normal. A diagnosis of Tolosa-Hunt syndrome was then considered, as well as a possible vascular neuropathy and basal meningitis.

The patient previously treated with prednisolone as a case of Tolosa-Hunt syndrome, but without dramatic response to treatment, antidepressant and anticonvulsant drugs are used to control neuropathic pain. Four months later, he had developed a painless mass in the left sided of the neck, on examination a firm rubbery painless mass palpable in the left anterior cervical region. Ultrasound (U/S) of the neck was performed and showed that the mass lesion was heterogeneous structure and did not seem to infiltrate the vessel most likely lymphadenopathy.

Diagnosis included either a primary or secondary neoplastic process and a granulomatous lymph node (such as tuberculosis). A second specific MRI for base of the skull was then performed and revealed a mass lesion infiltrate the base of skull fig(1). Incisional biopsy then taken and sent for histopathology and showed lymph node infiltration by fibrous tissue and a lot of reactive mature lymphoid tissue with eosinophils and a lot of large binucleated cells consistent with Hodgkin's lymphoma of mixed cellularity type diagnosed by pathologist.

### **Discussion**

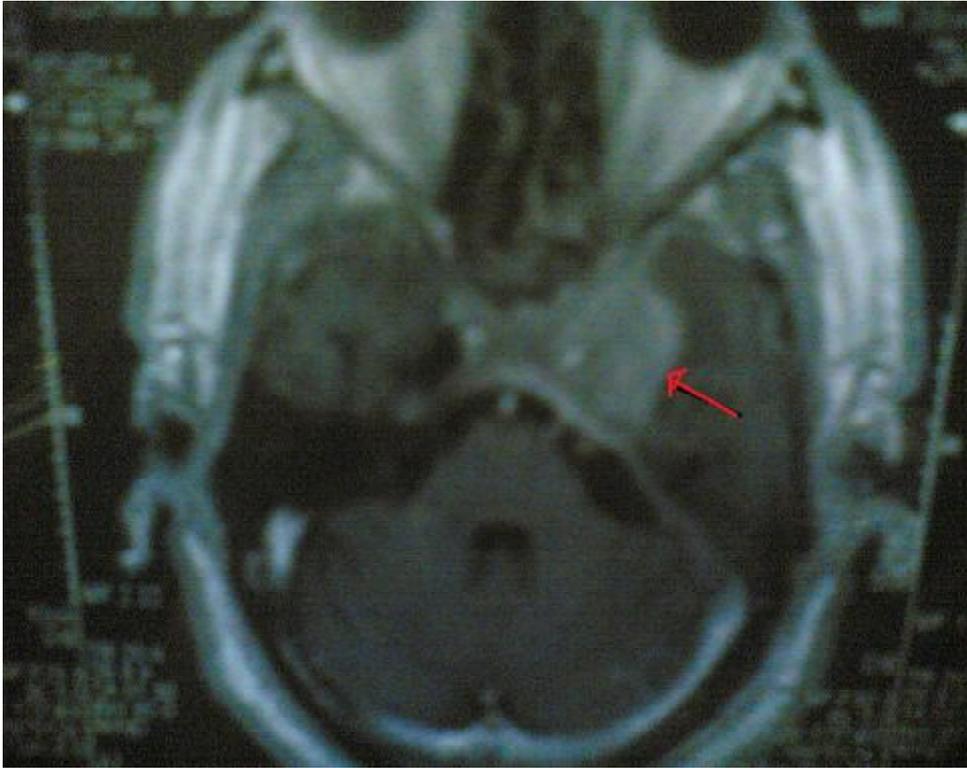
There are extensive studies on Hodgkins lymphoma in the literatures, dealing with different aspect of the disease, but a small number of case reports regarding neurological presentation of Hodgkins lymphoma in the literatures. In spite of that Hodgkins lymphoma very unlikely to start with initial presentation of neurological syndrome.

The disease should be regarded as one of the differential diagnosis for painful ophthalmoplegia refractory to steroid therapy[5]. However there are sporadic cases of lymphoma present with painful ophthalmoplegia in the world, describes a case presented with ophthalmoplegia but no gross neurological manifestations and an isolated mass in the left upper thigh [6]. Another case presented with painful ophthalmoplegia as initial manifestation

looked like Tolosa-Hunt syndrome, then two months later, however, pelvic malignant lymphoma was found, followed by lymphomatous meningitis [7].

### **References**

1. Mauch PM, Kalish LA, Kadin M et al. Patterns of presentation of Hodgkins disease. *Cancer* 1993;71:2062.
2. Temmel A., Czerny C, Susani M et al. Ophthalmoplegia as an unusual initial symptom of non-Hodgkins lymphoma in the head and neck. *European Archives of Oto-Rhino-laryngology* 1997 254:47073.
3. Hughes RA; Britton T. Effect of lymphoma on the peripheral nervous system. *R Soc Med* 1994 sep; 87(7):526-30.
4. Plante-Bordeneuve, Williams Z, Norbash A et al. Subacute sensory neuropathy associated with Hodgkins disease. *J Neural Sci* 1994 feb 121(2):155-8.
5. Lee DS, Woo KI, Chang HR. Lymphoma presenting as painful ophthalmoplegia. *Korean J Ophthalmol.* 2006 Sep;20(3):192-4.
6. Muzammil S, Kreze OD. Ophthalmoplegia with diffuse large B cell lymphoma. *J Int Med Res* 2007 Nov-Dec 35(6) 930-2.
7. Hoe Heo Ji, Kee Park, Sunwoo Nam. Painful ophthalmoplegia associated with pelvic malignant lymphoma. *Neuro.Kr Journal* vol 5, no.2, December 1987:272.



Fig(1): MRI with contrast showing mass lesion at the left base of the skull and partially of left temporal lobe.