

presentation, if not minutes, there is no scientific evidence to support this. The body of published evidence about the timing of surgery roughly divides into two groups. One set of reports indicate that the timing of surgery should be within 1 month of macular detachment.⁶⁻⁹ The other group of reports indicates that there is no benefit in urgent surgery as long as scheduled surgery can be performed within 7–10 days.¹⁰⁻¹³ Thus, best evidence-based practice would dictate that surgery for 'macula-on' detachments should be a scheduled event within 7 days of occurrence. This evidence shows that there is no need for out-of-hours surgery, be it over the weekend, as the outcome has not been scientifically shown to be better. In fact, there is an argument to support the contention that out-of-hours surgery may have worse results for various reasons, including the absence of an appropriate team, limited facilities, and possibly a senior trainee operating unsupervised. Perhaps it is time to heed the 'my mother' test. I recently saw a colleague's mother with a macula on retinal detachment on a Friday afternoon with a 5-day history of acute onset floaters. I offered to operate on her the same night, at which she responded 'what have you been doing all day!' I honestly responded that I had been operating all morning and then had a busy clinic in the afternoon, at which she suggested that I could not be expected to operate at my best that night and she would rather have her surgery on Monday morning.

The second fallacy in this debate is the perceived divide between tertiary centres and district general hospitals. Clearly, the divide should be between surgeons with adequate experience and those without, irrespective of the setting in which they practice. Therefore, a consultant in a district general hospital with the skills and facilities would entirely appropriately operate on retinal detachments but the unsupervised senior trainee (fellow/ASTO) would not, even in a tertiary referral centre.

There needs to be a radical rethinking on the appropriate management of retinal detachments, especially the 'urgent' ones, and this debate needs to be informed by evidence not opinion.

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Sir, Methylprednisolone pulse therapy in patient with isolated superior oblique myositis

Idiopathic orbital myositis (IOM) is a type of orbital pseudotumour in which one or more extraocular muscles can be involved. However, oblique muscle involvement is much less common than rectus muscle.¹ In a large series of 75 patients with IOM, involvement of lateral rectus muscle was found to be 33% and followed by medial rectus (29%), superior rectus (23%), inferior rectus (10%), inferior oblique (3%), and superior oblique

(SO, 2%). Especially, isolated SO myositis is very rare, and often causes persistent gaze restriction.²⁻⁵ We report one patient with isolated SO myositis treated successfully with pulse intravenous methylprednisolone, and also reviewed the clinical presentation and treatment outcome of previously reported four cases.

Case report

A 35-year-old female was referred with a 4-week history of painful swelling around right eye accompanied by diplopia on attempted eye movement. She had been treated before referral with oral antibiotics for presumed periorbital infection. There was no history of thyroid disease. On examination, she had swelling and tenderness of right upper lid and injection over right upper bulbar conjunctiva. Exophthalmometer readings were normal. Ocular motility revealed painful restriction especially with attempted elevation of the right eye in adduction (Figure 1). Physical examinations were unremarkable. The laboratory investigations, including complete blood count, blood sugar, erythrocyte sedimentation rate, thyroid function tests, and autoimmune antibody screen, showed no abnormality. Orbital computed tomography (CT) showed enlarged right SO muscle without tendon involvement (Figure 2). Magnetic resonance imaging (MRI) also revealed a swelling and heterogeneously enhancing right SO muscle (Figure 2). A presumptive diagnosis of IOM was made and the patient was treated with intravenous methylprednisolone (1 g/day for 3 days) and followed by

oral prednisolone. Her symptoms improved immediately, and steroid was gradually tapered. At 6 weeks after treatment, she had experienced a marked clinical recovery (Figure 1) and follow-up CT

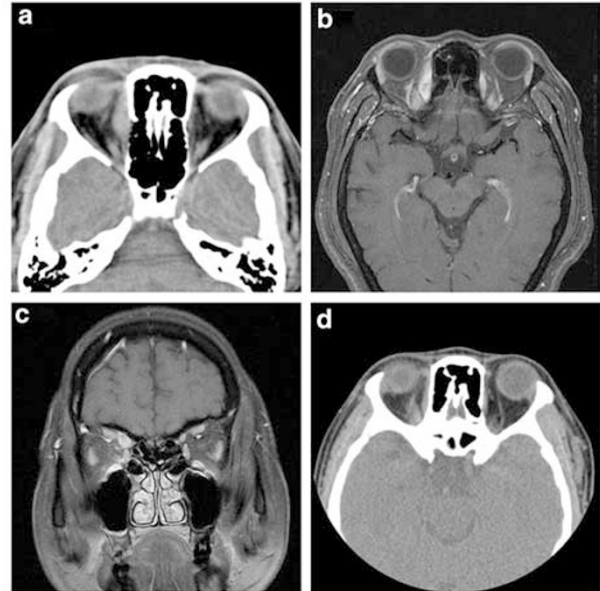


Figure 2 (a) Axial computed tomographic image revealed an enlargement of the right superior oblique muscle without tendon involvement. (b and c): The contrast enhanced T1-weighted MRI images with fat suppression clearly also showed heterogeneous enhancement and fusiform swelling of the right superior oblique muscle. (d) After 6 weeks of treatment, the swelling of right superior oblique muscle was marked resolved on follow-up CT.

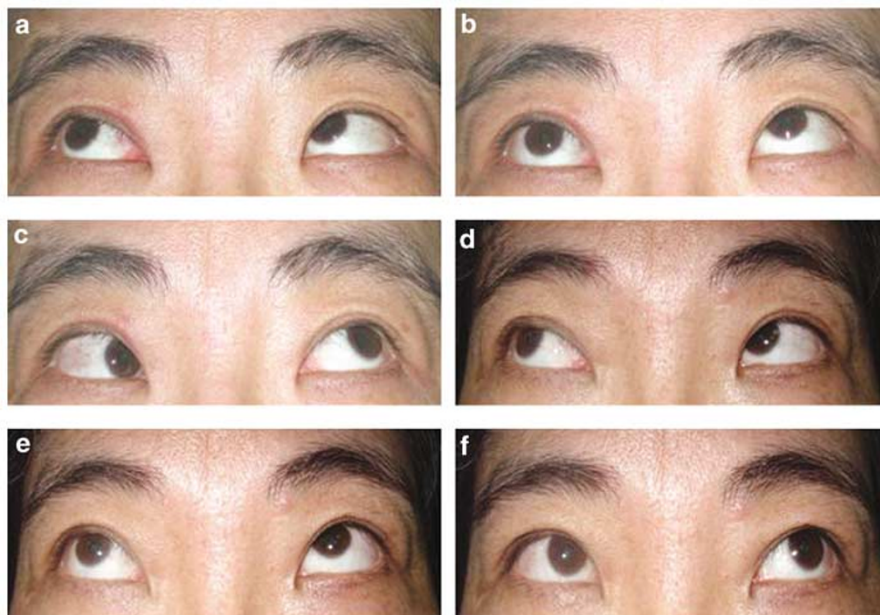


Figure 1 Ocular versions demonstrate limitation of supraduction of the right eye, particularly in adduction (a, b, c). Marked clinical recovery after 6 weeks of steroid pulse therapy (d, e, f).

Table 1 Clinical Summary of 5 Cases of isolated superior oblique (SO) myositis

<i>Study</i>	<i>Age</i>	<i>Sex</i>	<i>Involved muscle</i>	<i>Clinical presentation</i>	<i>Duration of symptoms</i>	<i>Initial diagnosis</i>	<i>Orbital imaging</i>	<i>Systemic findings</i>	<i>Treatment</i>	<i>Follow-up period and outcome</i>
Lee Wan (1988) ²	19	Male	Left SO	Pain, periorbital oedema, ophthalmoplegia, conjunctival injection, proptosis	7 days	Orbital abscess	CT: a irregular mass along the Left superonasal orbit; Echography: low-reflective enlargement of SO muscle and tendon	Afebrile leukocytosis	Oral steroid (initial: parenteral antibiotics)	3 weeks, persistent Brown's syndrome
Sekhar (1993) ³	NS	NS	Right SO	A mass in the upper medial orbit	NS	SO myositis	CT: enlarged SO muscle	NS	Loss to follow-up	Loss to follow-up
Moorman (1995) ⁴	31	Female	Left SO	Pain, diplopia, headache	35 days	Thyroid eye disease	CT: swelling of the insertion and belly of SO muscle Echography: reduced reflectivity of the belly and swelling of the insertion of SO	NP	Oral steroid	>6 months, no recurrence
Stidham (1998) ⁵	57	Male	Right SO	Pain, swelling, diplopia, proptosis, mild ptosis	5 days	SO myositis	CT: enlarged SO muscle without tendon involvement	NP	Oral steroid	5 months, no recurrence, residual restriction of elevation of eye
Tsai (present)	33	Female	Right SO	Pain, swelling, diplopia, conjunctival injection	28 days	Periorbital infection	CT: enlarged SO muscle without tendon involvement MRI: a fusiform swelling of SO muscle, and enhanced heterogeneously with gadolinium	NP	Pulse therapy (before referral: oral antibiotics)	12 months, no recurrence

CT: computed tomography; NP: nothing particular; NS: not stated; MRI: magnetic resonance imaging.

showed swelling of SO muscle was resolved (Figure 2). No evidence of recurrence was noted at 1 year after treatment.

Comment

To our knowledge, this is the first time that pulse intravenous methylprednisolone has been used in the treatment of isolated SO myositis, and the result is promising. Only five patients with isolated SO myositis have been reported, including the present case.²⁻⁵ Table 1 summarizes their clinical presentation. Due to their nonspecific clinical manifestations, early recognition seems to be difficult. Three of five patients were initially diagnosed as orbital abscess, periorbital infection and thyroid eye disease respectively. Prior antibiotic may obscure and delay the diagnosis.

CT, echography, and MRI can provide valuable features to identify the affected SO muscles. CT is the preferred method, which can demonstrate the swelling SO muscle along the superonasal orbit either. Echography may show homogenous low-reflective enlargement of SO muscle, which were different from the high-internal reflectivity in thyroid orbitopathy.^{2,4,6} MRI can further demonstrate a typical heterogeneously gadolinium-enhanced SO muscle, which allowed differentiation from the focal or nodular muscle enlargement seen in cases of metastatic infiltration. Tendon sparing was seen in two of five cases, which suggests tendon involvement could not be the only radiological distinction between IOM and thyroid orbitopathy.

Although all cases responded to systemic steroid, residual gaze limitation occurred in two of three patients treated with oral steroid.^{2,5} Incomplete resolution did persist in the case steroid therapy was began soon after onset of symptoms.⁵ It is still unclear, how early intervention can preserve normal extraocular muscle function. Since the interval between the onset of symptoms and institution of therapy in our case was more than 5 weeks, impending fibrotic changes of extraocular might have occurred. Therefore, intravenous methylprednisolone was administrated in our patient to expedite relief of inflammation which achieved good clinical response. Intravenous steroid treatment has been documented for the treatment of many serious inflammatory eye diseases.⁷ However, it needs further investigation to compare the long-term efficacy between pulse therapy and oral steroid in the treatment of isolated SO myositis.

In conclusion, despite isolated SO myositis remains a rare entity, to be familiar with their imaging features, corrected with clinical findings, allows for early diagnosis and treatment. In our case, intravenous

methylprednisolone appears to be an effective treatment when earlier intervention is impossible.

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