

# Raymond syndrome and conjugate gaze palsy from a paramedian pontine infarct

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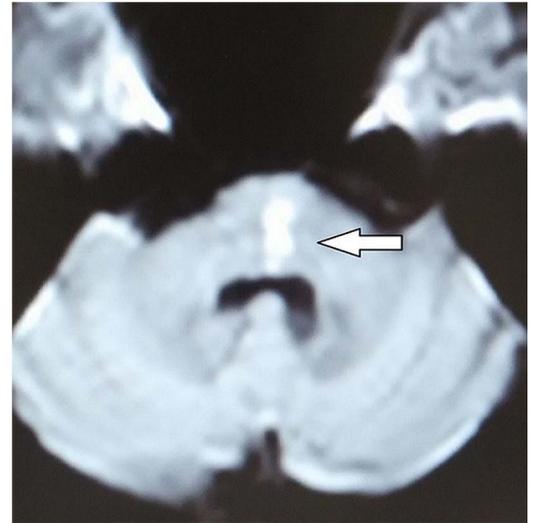
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## DESCRIPTION

A 65-year-old man with a history of hypertension, diabetes mellitus and hyperlipidaemia, was admitted for sudden-onset binocular diplopia and right-sided weakness. Physical examination showed left abducens nerve palsy and impaired left horizontal conjugate gaze (video 1). Saccades and smooth pursuit were impaired. The horizontal vestibulo-ocular reflex was impaired (video 2). Pupillary and levator function was normal. The patient had right-sided central paresis of the lower part of the face and limbs (Medical Research Council grading 0/5). MRI of the brain revealed a paramedian left pontine infarct (figure 1). His condition improved significantly after treatment with aspirin and rehabilitation therapy.

Raymond syndrome with conjugate gaze palsy is rare. Raymond syndrome is characterised by ipsilateral abducens nerve palsy with contralateral limbs and central facial paresis. It is caused by lesions of medial caudal pons damaging the abducens nerve and the non-decussated corticofacial and pyramidal fibres.<sup>1</sup> Some patients have had



**Figure 1** Diffusion-weighted MRI showing a paramedian left pontine infarct (arrow).

lesions sparing the corticofacial fibres without having contralateral facial paresis.<sup>2</sup> Conjugate gaze palsy is caused by lesions damage the abducens nucleus resulting in complete ipsilateral eye movement paralysis.<sup>3</sup>



**Video 1** Left abducens nerve palsy and impaired left horizontal conjugate gaze.



**Video 2** Impairment of the horizontal vestibulo-ocular reflex.

## Learning points

- ▶ Raymond syndrome with conjugate gaze palsy is rare.
- ▶ Raymond syndrome is characterised by ipsilateral abducens nerve palsy with contralateral limbs and central facial paresis. It is caused by lesions of medial caudal pons damaging the abducens nerve, and the non-decussated corticofacial and pyramidal fibres.
- ▶ Conjugate gaze palsy is caused by lesions damaging the abducens nucleus resulting in complete ipsilateral eye movement paralysis.

**Competing interests** None declared.

**Patient consent** Obtained.

**Provenance and peer review** Not commissioned; externally peer reviewed.

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