

Questions to Test Your Knowledge

For lecture – Anatomy: Orbit and Extraocular Muscles

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When the head is tilted to the right, the left eye undergoes slight extorsion. What muscle is primarily responsible for the extorsion?

- A. Inferior oblique muscle
- B. Lateral rectus muscle
- C. Medial rectus muscle
- D. Superior rectus muscle
- E. Superior oblique muscle

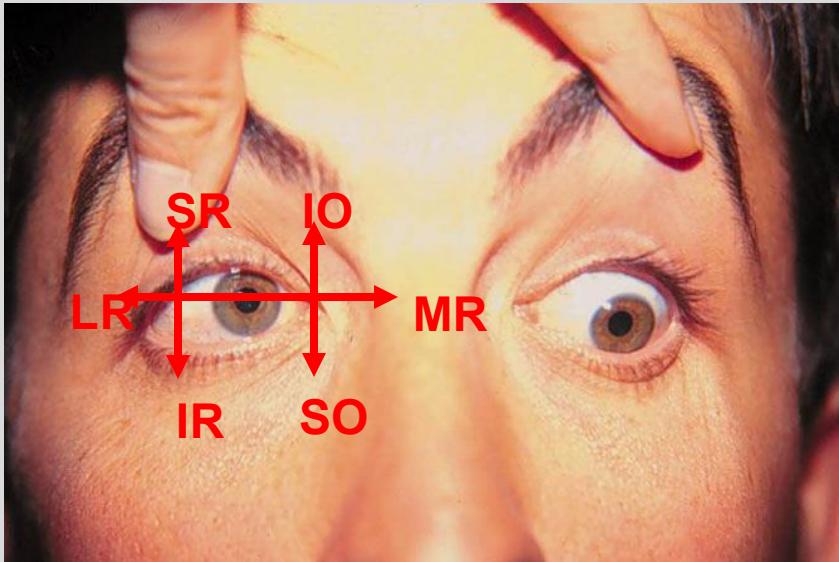
Patient presents as



What is the affected structure?

- a) left lateral rectus
- b) left medial rectus
- c) right abducens nerve
- d) right oculomotor nerve
- e) right trochlear nerve

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Answers (Spoiler Alert)

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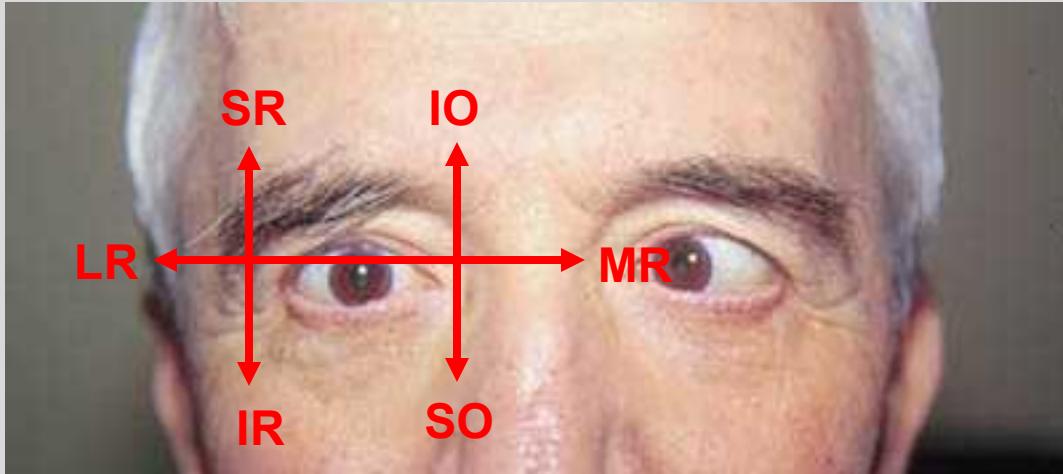
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Rationale: There are actually 2 extraocular muscles that cause extorsion, the inferior rectus and the inferior oblique (only one is listed here). As both muscles attach to the inferior side of the eye, when they contract, they cause the eye to extort.

Patient presents as



What is the affected structure?

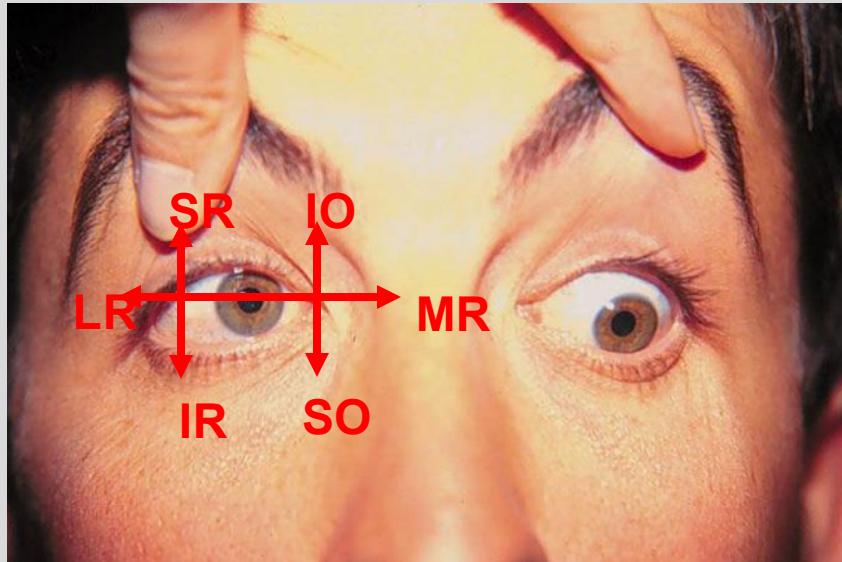
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Rationale: You have asked the patient to follow the light. Whereas the left eye can follow the light, the right eye remains in primary position instead of abducting. Thus the right abducens nerve and/or the lateral rectus, which it innervates, are affected.

Patient presents as



Rationale: Whereas the left eye can follow the light, the right eye is elevated in the adducted position. This indicates that the right trochlear nerve and/or superior oblique, the muscle it innervates, is affected.



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- e) **right trochlear nerve**