Keys to Solve Park- 3 Step Test

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Authors' contributions

This work was carried out in collaboration between both authors. Author PHC had modified and wrote the techniques of this test. Author BHS managed the abstract and literature review along with formatting of the article. Both authors had read and approved the final manuscript.

Short Communication

ABSTRACT

This paper aims for simplification of the technique of Park 3 step test. The 3 steps include following hyperdeviation, gaze and head tilt of the eye.

Keywords: Hyperdeviation; gaze; head tilt.

1. INTRODUCTION

Park's 3 step test is quite essential in diagnosing cyclovertical palsies. Here, the following procedure shows how this test is diagnosed with ease in a simple manner [1-2]. This test consists of 3 steps. They are:

Step 1 - Hyperdeviation

Here each patient is asked to look at the primary gaze and examiner will notice which eye is hyper deviated [3].

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Step 2 – Gaze

Here, the examiner has to focus on gaze and examiner will notice that in which gaze hyperdeviation is highest. Gaze will be considered concerning which eye is affected [3].

➢ In oblique muscles, gaze will be on opposite side with respect to which eye is affected [4-6].
➢ In rectus muscles, gaze will be on the same side with respect to which eye is affected.

Step 3 – Head Tilt

Here, each patient is instructed to tilt his/her head to both right and left side respectively, and the examiner will notice in which head tilt, hypertropia is highest. Head tilt should always be considered in respect of hypertropia [7-11].

➢ In oblique muscles, hypertropia is on the same side with respect to which eye is hypertropic.
➢ In rectus muscles, hypertropia is on the opposite side with respect to which eye is hypertropic.

EXAMPLES:

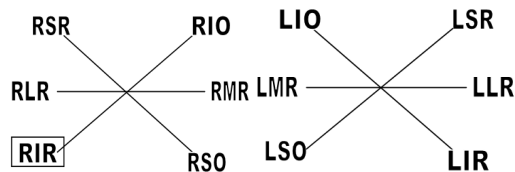1. Right eye Superior Rectus Palsy
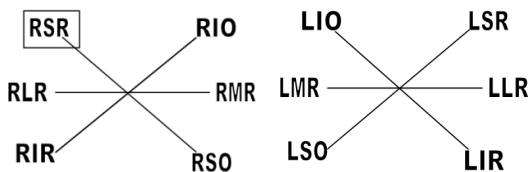
STEP 1 – Hypertropia in left side.

STEP 2 – Right gaze (Gaze is always respect to which eye is affected, according to above formula that's why right gaze is present here).

STEP 3 – Right head tilt (Head tilt is always respect to hypertropia, according to above formula that's why right head tilt is present here).

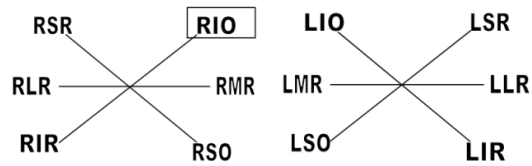2. Right eye Inferior Rectus Palsy

STEP 1 – Hypertropia in right side.

STEP 2 – Right gaze (gaze is always respect to which eye is affected, according to above formula that's why right gaze is present here).

STEP 3 – Left head tilt (head tilt is always respect to hypertropia, according to above formula that's why left head tilt is present here).
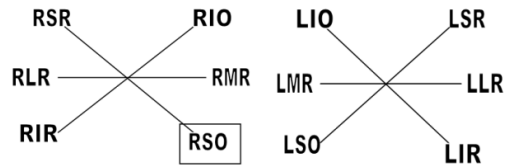
3. Right eye Inferior Oblique Palsy

STEP 1 – Hypertropia in left side.

STEP 2 – Left gaze (gaze is always respect to which eye is affected, according to above formula that's why left gaze is present here).

STEP 3 – Left head tilt (head tilt is always respect to hypertropia, according to above formula that's why left head tilt is present here).
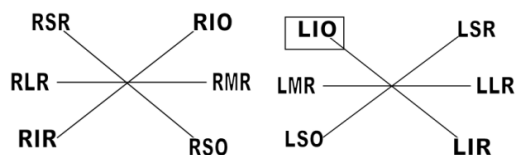
4. Right eye Superior Oblique Palsy

STEP 1 – Hypertropia in right side.

STEP 2 – Left gaze (gaze is always respect to which eye is affected, according to above formula that's why left gaze is present here).

STEP 3 – Right head tilt (head tilt is always respect to hypertropia, according to above formula that's why right head tilt is present here).
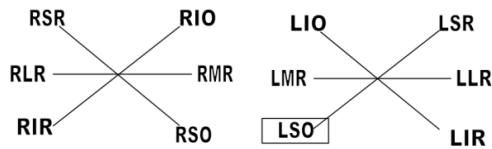
5. Left eye Inferior oblique palsy

STEP 1 – Hypertropia in right side.

STEP 2 – Right gaze (gaze is always respect to which eye is affected, according to above formula that's why right gaze is present here).

STEP 3 – Right head tilt (head tilt is always respect to hypertropia, according to above formula that's why right head tilt is present here).

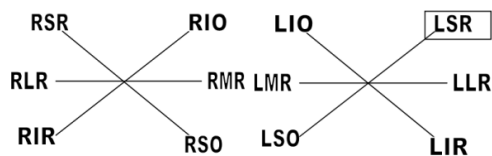6. Left eye Superior Oblique Palsy

STEP 1 – Hypertropia in left side.

STEP 2 – Right gaze (gaze is always respect to which eye is affected, according to above formula that's why right gaze is present here).

STEP 3 – Left head tilt (head tilt is always respect to hypertropia, according to above formula that's why left head tilt is present here).
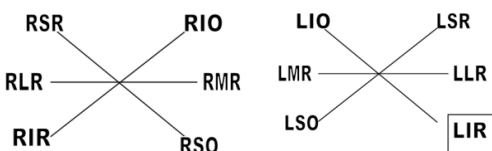
7. Left eye Superior rectus palsy

STEP 1 – Hypertropia in right side.

STEP 2 – Left gaze (gaze is always respect to which eye is affected, according to above formula that's why left gaze is present here).

STEP 3 – Left head tilt (head tilt is always respect to hypertropia, according to above formula that's why left head tilt is present here).

8. Left Eye Inferior Rectus Palsy

STEP 1 – Hypertropia in the left side.

STEP 2 – Left gaze (gaze is always respect to which eye is affected, according to above formula that's why right gaze is present here).

STEP 3 – Right head tilt (head tilt is always respect to hypertropia, according to above formula that's why right head tilt is present here).

2. CONCLUSION

This test is more useful in the diagnosis of palsies of trochlear, abducent and also oculomotor nerves.

This paper shows about simplified techniques in solving muscle palsies in routine practice.

CONSENT

It is not applicable.

ETHICAL APPROVAL

It is not applicable.

COMPETING INTERESTS

Authors have declared that no competing interests exist.

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