

Binocular Vision

Convergence tests

Convergence anomalies make binocular vision uncomfortable at near. They invariably coexist with a decompensated near exophoria and in many cases are associated with poor accommodation. Convergence can be tested by measuring the near point of convergence and assessing jump convergence. When convergence is poor in children and pre-presbyopic adults it is prudent to also check accommodation.

Tips for measuring the near point of convergence

- Test is done with spectacles, and reading correction if required
- Detailed targets encourage accurate accommodation
- Look at the eyes for when they no longer converge because doubling is not always appreciated
- Encourage the patient to try and maintain fusion when they begin to struggle
- Record result in centimetres
- Normally less than 8cm

Tips for assessing jump convergence

- Useful in borderline cases of convergence insufficiency when NPC between 8-20cm.
- Alternate gaze between a distance target and an accommodative target at about 15cm
- Watch for slow, hesitant movements and premature fatigue