Ocular Alignment

Normally, by 3 to 4 months old, children are able to fixate on one visual field with both eyes simultaneously (binocularity). In **strabismus**, or cross-eye, one eye deviates from the point of fixation. If the misalignment is constant, the weak eye becomes "lazy," and the brain eventually suppresses the image produced by that eye. If strabismus is not detected and corrected by 4 to 6 years old, blindness from disuse, known as **amblyopia**, may result.

Tests commonly used to detect misalignment are the corneal light reflex and the cover tests. To perform the **corneal light reflex test**, or **Hirschberg test**, shine a flashlight or the light of the ophthalmoscope directly into the patient's eyes from a distance of about 40.5 cm (16 inches). If the eyes are **orthophoric**, or normal, the light falls symmetrically within each pupil (Fig. 4-18, *A*). If the light falls off-center in one eye, the eyes are misaligned. **Epicanthal folds**, excess folds of skin that extend from the roof of the nose to the inner termination of the eyebrow and that partially or completely overlap the inner canthus of the eye, may give a false impression of misalignment (**pseudostrabismus**) (see Fig. 4-18, *B*). Epicanthal folds are often found in Asian children.

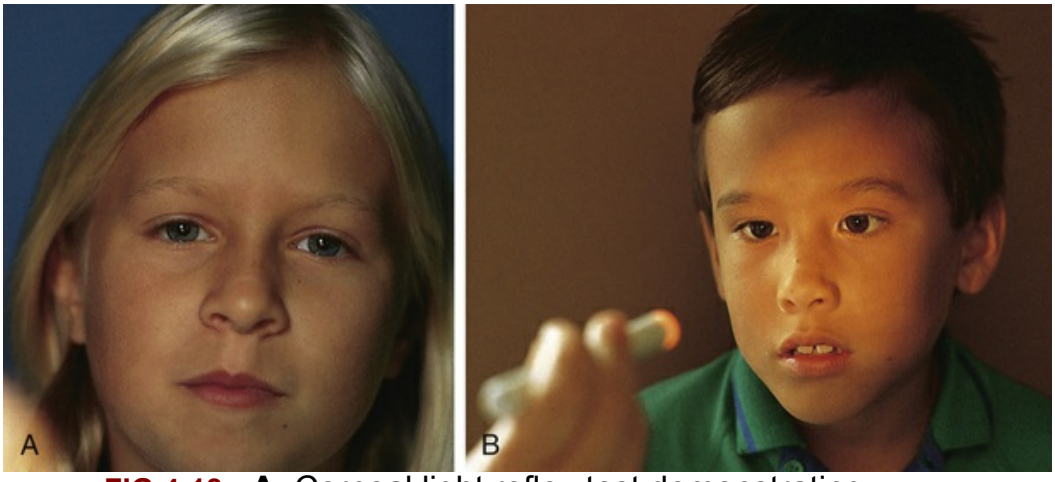

FIG 4-18 **A,** Corneal light reflex test demonstrating orthophoric eyes. **B,** Pseudostrabismus. Inner epicanthal folds cause the eyes to appear misaligned; however, the corneal light reflexes fall perfectly symmetrically.

In the **cover test**, one eye is covered, and the movement of the