CHAPTER 46

Syphilis

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General Features

- Syphilis is an infectious disease caused by a spirochete, *Treponema pallidum*; it is most commonly spread by sexual transmission.
- Syphilis is known as the "Great Imitator," as systemic manifestations are variable. It can involve any part of the eye, with syphilitic uveitis being the most common type.
- Congenital syphilis is characterized by Hutchinson's teeth, saddle nose deformity, deafness, and interstitial keratitis; pigmentary changes in the retina are varied and patchy.
- The manifestations of acquired syphilis change over time:
  - *Primary syphilis* (2–6 weeks after infection) has a painless chancre.
  - *Secondary syphilis* (4–10 weeks after infection) has fever/malaise and generalized rash involving the palms and soles.
  - *Tertiary syphilis* (months or years after the infection) has neurological and cardiovascular manifestations.
- *Ocular changes:* Syphilis can involve virtually any ocular structure, causing conjunctivitis, episcleritis, scleritis, interstitial keratitis, granulomatous uveitis, chorioretinitis, retinitis, vasculitis, or papillitis.
  - Acute syphilitic posterior placoid chorioretinopathy (ASPPC) (Fig. 46.1) is due to syphilitic infection of the retinal pigment epithelium (RPE) in the macular or peripapillary region. The lesions are large and placoid, and following resolution, the involved RPE shows a leopard-spot appearance on fluorescein angiography, with exudative retinal detachment.
  - Pigmentary retinopathy can occur in both congenital and acquired syphilis and may mimic advanced retinitis pigmentosa. Pigmentary changes are usually in clumps, along with chorioretinal scars; typical bony-spicule pigmentation is uncommon. Therefore, syphilis can masquerade retinitis pigmentosa (Pseudoretinitis pigmentosa).

Suggested Reading

Asensio-Sánchez VM. Syphilitic chorioretinitis: final outcome without treatment. Arch Soc Esp Oftalmol. 2018; https://doi.org/10.1016/j.oftal.2018.01.003. [Epub ahead of print].

Tsui E, Gal-Or O, Ghadiali Q, Freund KB. Multimodal imaging adds new insights into acute syphilitic posterior placoid chorioretinitis. Retin Cases Brief Rep. 2017; https://doi.org/10.1097/ICB.0000000000000645. [Epub ahead of print].

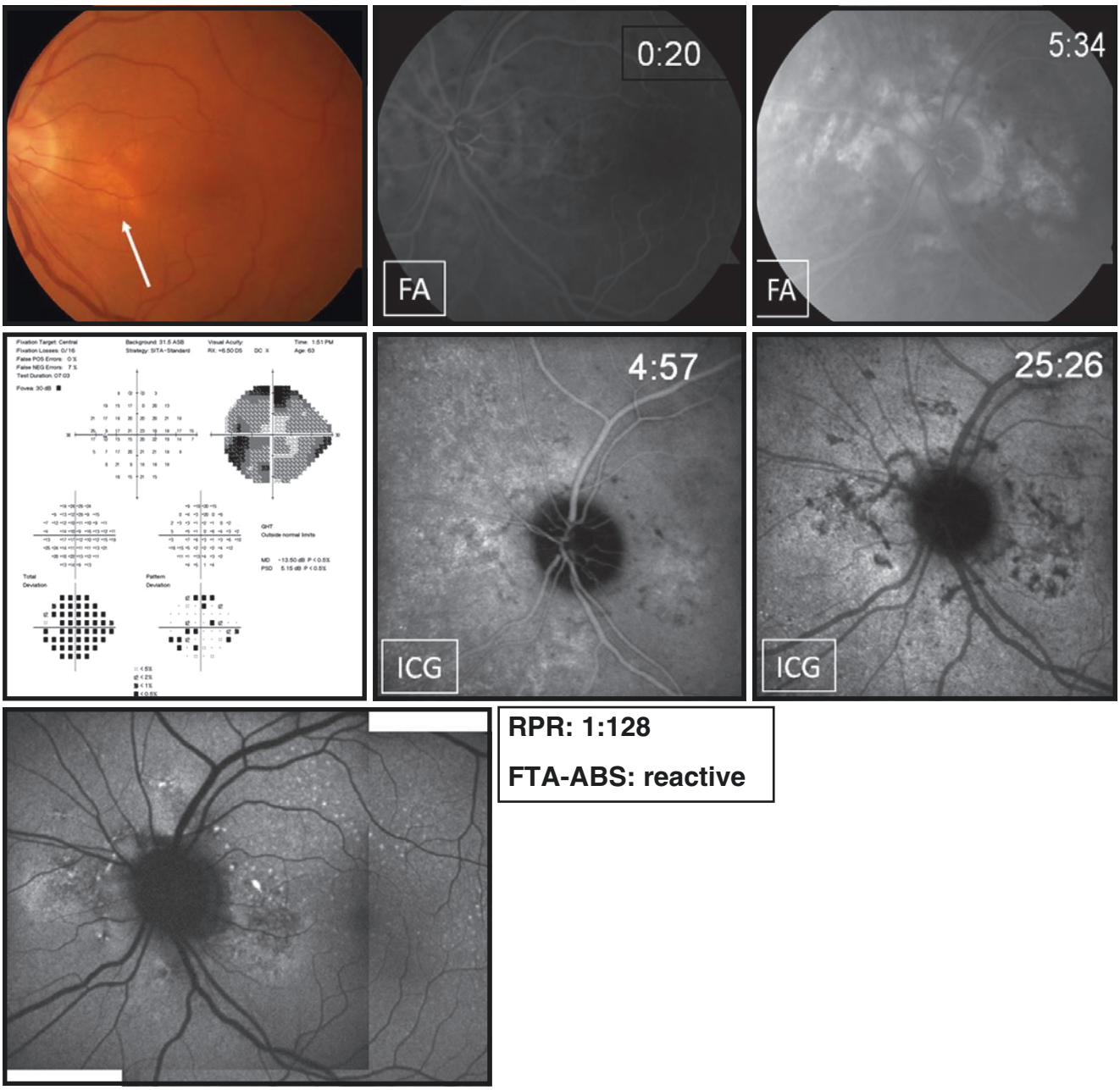

Fig. 46.1 Acute syphilitic posterior placoid chorioretinopathy. A 63-year-old patient presented with enlargement of the blind spot and decreased vision (20/160). Color fundus shows multiple grayish-white lesions at the deeper level (*arrow*) and corresponding scotoma. Fluorescein angiography (FA) shows early hypofluorescence and late staining. Indocyanine green angiography (ICG) shows hypofluorescence, and fundus autofluorescence (FAF) shows characteristic hyperautofluorescent dots in the peripapillary and macular area