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Intraoperative OCT of a Retinal Tack

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Retinal tacks historically were used in complex retinal detachment surgeries. Currently, retinal tacks are used to secure the Argus II Retinal Prosthesis electrode array to the retina (Fig 1A, **arrow**). Intraoperative optical coherence tomography gives us a unique opportunity to visualize the interaction of the tack with the ocular coats (retina, choroid, and sclera; Fig 1B, **arrow**). In this case, the insertion tool did not disengage fully from the tack and intraoperative optical coherence tomography allowed us to visualize the dynamic behavior as gentle upward lifting of the tack resulted in consequent infolding of all layers (Fig 1C, successive frames from the video), suggesting complete penetration of the ocular coats. After removal of the tool, a normal contour is restored (Fig 1D).

Figure 1.