Fig. 13.9 Repositioning a medially luxated condyle through a preauricular approach. Inferior traction of the mandible is accomplished through a clamp placed percutaneously, which the assistant pulls downward (after Jacopo Tintoretto, Portrait of a Senator, ca. 1580, Foundation Museum Bornemisza, Madrid).

Fig. 13.10 The condyle is now repositioned and intermaxillary fixation is applied (after Jacopo Tintoretto, Portrait of a Senator, ca. 1580, Foundation Museum Bornemisza, Madrid).

Fig. 13.11 Miniplate osteosynthesis with a six-hole plate. A transcutaneous trocar is used to facilitate the placing of the three inferior screws.

Fig. 13.12 Miniplate osteosynthesis with two miniplates.
Complications

Problems such as limited opening interfering with function, occlusal shifts, late arthritic changes, dysfunction, and deformities such as asymmetry and open bite have been previously noted. Such problems have also been noted with closed reductions (Jeter and Hackney, 1992). Hemorrhage and development of a hematoma are possible. Some patients have motor weakness of the lower lip at the immediately postoperative stage. This damage is temporary and is most likely caused by tension in the surrounding soft tissues during the surgical procedure. No damage to the facial nerve has been observed in any cases operated on via the preauricular approach. The risk of auriculotemporal syndrome in connection with a preauricular approach is low (Swanson, Laskin and Campbell, 1991). Postoperatively, partial resorption and positional changes of the condylar head are possible (Ellis, Simon, and Throckmorton, 2000; Sugiura et al., 2001). The most severe complication was described by Iizuka et al. (1991). One patient had persistent joint pain and limited mouth opening with a total condylar resorption and plate fracture after extraoral miniplate osteosynthesis, which made a subsequent arthroplasty with an autogenous costochondral graft necessary. Plate fracture is considered to be caused by an alteration of the condylar position, as a result of incorrect fracture reduction and unphysiological functional loading.

Fig. 13.13 Another alternative is an L-shaped plate, which can be applied without the use of a trocar.