According to the correct osteotomy technique, the inferior alveolar nerve should be situated totally in the distal fragment. In many cases the nerve can, however, be identified between the fragments and sometimes even to some extent be attached to or indented into the outer cortex of the proximal fragment. Releasing should be carried out with extra care. The looseness and mobility of the fragments is checked bimanually. Thereafter, the acrylic splint is applied and the anterior segment of the mandible is placed in the planned relation to the maxilla. Mandibulomaxillary fixation is carried out tightly with wires or with an orthodontic "power chain."

In case of advancing the tooth-bearing fragment, the convergence of the mandible should be kept in mind. The osteotomy lines are usually also convergent, and sliding the distal fragment anteriorly may make the proximal fragments flare medially (**Fig 7.2-5a–b**). When correcting a class II malocclusion by advancement, the convergence leads to anterior gap formation. If this gap is eliminated by compression, the condyles tend to move outward (**Fig 7.2-6**). In mandibular setback, a cortical fragment from the anterior part of the proximal fragment should be removed to allow the mandible to move posteriorly.

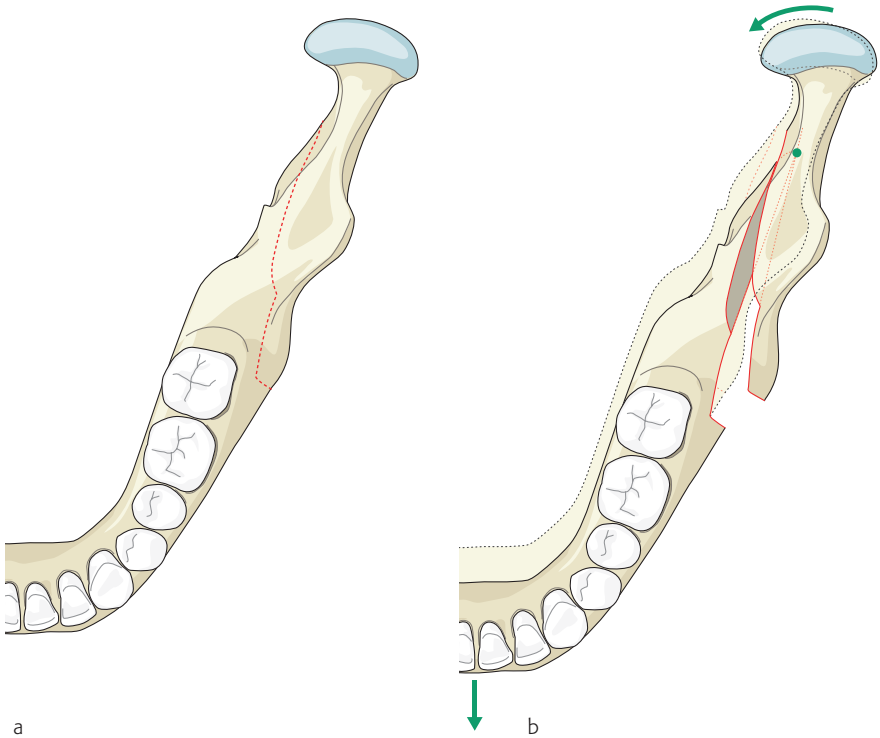

Fig 7.2-5a–b
a Marking of the osteotomy for sagittal split osteotomy of the mandibular ramus.
b Possible medial condylar displacement with mandibular advancement.

The most important phase of the fixation procedure is keeping the proximal fragments in the correct position within the glenoid fossa. Several devices and methods have been developed to achieve this, but manual seating by the surgeon is probably the most extensively used method. Earlier, when wire osteosynthesis was used, the position was not that critical because the flexibility of the system allowed slight movements of the condyle into a favorable position prior to healing of the osteotomies. Rigid fixation methods, though, are unforgiving and do not allow this adjustment (**Fig 7.2-7**).

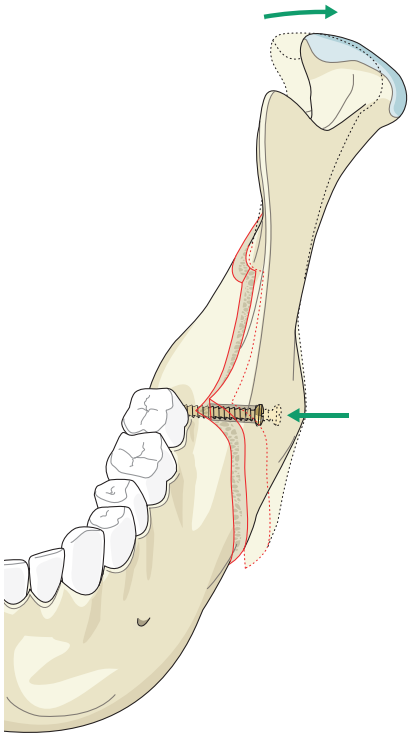

Fig 7.2-6 Possible outward rotation of condyle if anterior gap after mandibular advancement is closed by lag screw fixation.

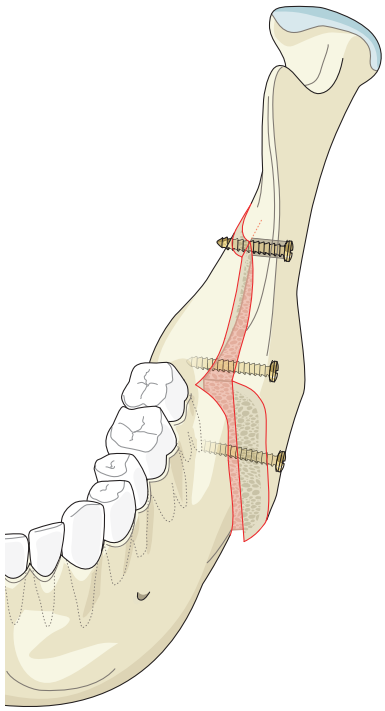

Fig 7.2-7 Correct fixation of sagittal split osteotomy and mandibular advancement. Anterior gaps are kept and stabilized with position screws. Posterior natural contact area is stabilized with a lag screw.