

Serial Nasal Bone Reduction: A New Approach to the Management of Nasal Bone Fracture

Atighechi, Saeid MD; Karimi, Ghasem MD



Abstract

Nasal bone fracture is the most common type of facial bone fracture. Although these injuries often do not seem to be severe, undertreatment of nasal trauma could lead to significant long-term problems. The postreduction incidence of nasal deformities requiring subsequent rhinoplasty or septorhinoplasty ranges from 9% to 50% in different studies. A clinical trial study on 330 cases with simple nasal bone fracture was performed. These patients were divided into 2 groups randomly. In the case group, serial nasal bone reduction was performed, and in the control group, classic nasal bone reduction was performed. The failure rate following the initial reduction in the first visit after reduction was 14.3% and 14.1% in the case and control groups, respectively, but their difference was not significant ($P > 0.05$). After serial reduction in the case group (step 3), the failure rate was diminished to 4.19%. It was statistically superior to the failure rate of the control group after 1 month of follow-up (14.7%) ($P = 0.001$). Serial nasal bone reduction could be helpful to diminish the failure rate of nasal bone reduction.