Surgical Treatment of Sternoclavicular Joint Dislocation Using a T-plate

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A 22-year-old man was hospitalized with a sternoclavicular joint (SCJ) dislocation caused by a traffic accident. Surgical reduction and fixation of the SCJ were performed using a T-plate. SCJ dislocation is rare, accounting for less than 1% of all dislocations, and is usually treated conservatively, although severe cases may require surgery. Surgery typically involves joint reduction and fixation using an autologous tendon graft, but this has disadvantages such as the requirement for additional surgery to obtain autologous tissue and an extended operative time. To overcome these issues, here, we performed a simple SCJ reduction and fixation using a T-plate and achieved good results.

Key words: 1. Sternum  
2. T-plate
can be accompanied by fatal structural injury [1,2]. Anterior dislocation is usually treated conservatively; however, surgical treatment can be considered for recurrent or severe dislocations [1-3]. Surgical treatment usually involves joint reduction using an autologous tendon graft and stable fixation [1-3], but it is also possible to secure unstable joint fixation using other suture materials [4].

SCJ stabilization using an autologous tendon is a large-scale surgical procedure that requires extended operative time, and obtaining the tendon graft carries a risk of injury to other organs. Moreover, during surgery, there is a high risk of injury to the large vessels that run close to the SCJ [5]. The present surgical method reduces the risk of large vessel or organ injury during graft tissue harvesting and decreases the surgical time. However, our study findings are limited because this was the first time that we attempted the
procedure, and no long-term follow-up was performed nor were comparisons with other surgical or conservative treatments made.

CONFLICT OF INTEREST

No potential conflict of interest relevant to this article was reported.

REFERENCES