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Basic Study

Possibilities for arthroscopic treatment of the ageing sternoclavicular joint

Rathcke M *et al.* Sternoclavicular joint surgical anatomy

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Scientific research process

1 What did this study explore?

Sternoclavicular arthroscopy is a very recently introduced possibility to address symptomatic conditions in the sternoclavicular joint. We wanted to visualize the changes in this joint in the ageing population to be able to optimize the use of sternoclavicular arthroscopy. Therefore, we did an anatomic study of this joint in deceased humans.

2 How did the authors perform all experiments?

We used cadavers from persons who had donated their body to scientific research. Sternum and clavicle was cut out, frozen and divided frontally with a thin band-saw through the central part of the sternoclavicular joint. The joint cartilages, the cartilage disc and the stability of the joint to superior forces were measured.

3 How did the authors process all experimental data?

Everything was photographed and all measurements were recorded and described with standard statistical methods.

4 How did the authors deal with the pre-study hypothesis?

The hypothesis of a high prevalence of degenerative changes of the disc and cartilages could be confirmed and the degree of changes was actually more severe than we had expected from literature.

5 What are the novel findings of this study?

We found typical patterns of changes in the ageing sternoclavicular joint, and they were potentially possible to treat by arthroscopic resection. Reinsertion of a torn ageing disc is not possible.