Histological and Viability Evaluation of Chondral Flaps of Patients with Cam Type FAI

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Purpose

Evaluate the viability and tissue characteristics of chondral flaps obtained from patients with FAI CAM type
Materials and Methods

• Eight male patients
• 30 (±5) years old
• FAI CAM type
• Cartilage biopsy of the chondral flap and control non affected cartilage
  – Viability Live Dead Staining
  – Safranine O (Mankin Score)
Chondral Flap Biopsy

Live-Dead Assay

Safranine-O
Results

• Viability Chondral Flap vs Control
  – 55% Viable Cells (Study Chondral Flap)
  – 95% Viable Cells (Control)
  – p>0.05

• Safranine-0 Chondral Flap vs Control
  – Mankin 13 (±2) (Study Chondral Flap)
  – Mankin 0.66 (±1.5) (Control)
  – p<0.05
Results

Control Samples

Study Chondral Samples
Conclusions

Chondral flaps from patients with CAM FAI remain viable. However, the tissue suffers constant degeneration. Removal of the flap followed by a restorative cartilage technique may be the best treatment option for this pathology.
References


Thank You

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