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Promising Long Term Functional Results For Autologous Osteochondral Transplantation (Oats)

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Conflict of Interest

- Nothing to disclosure

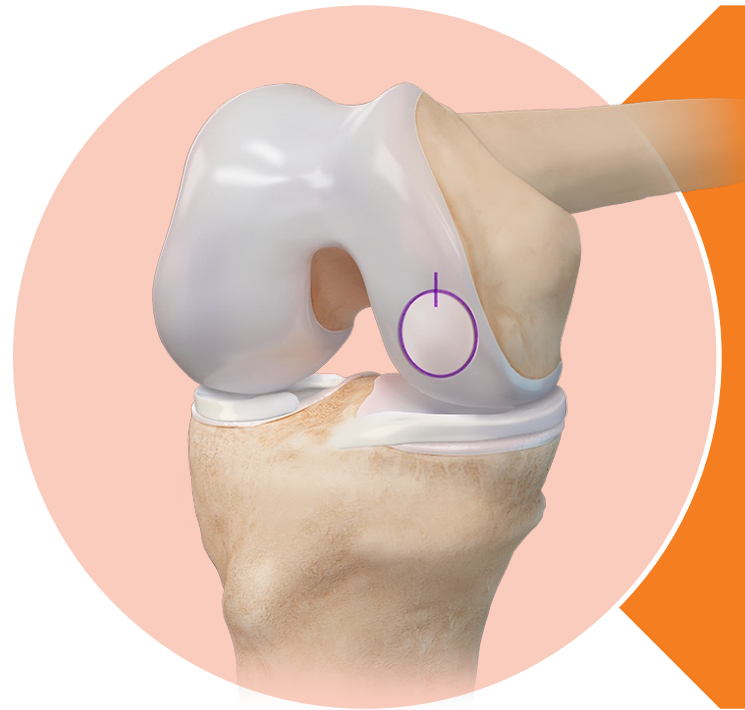


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Introduction



Autologous osteochondral transplantation (OAT) is a viable option in osteochondral lesions and has shown promising outcomes in the short and medium term.



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Objectives

- Describe the functional outcomes in the medium and long term for patients treated with OATS in femoral lesions.

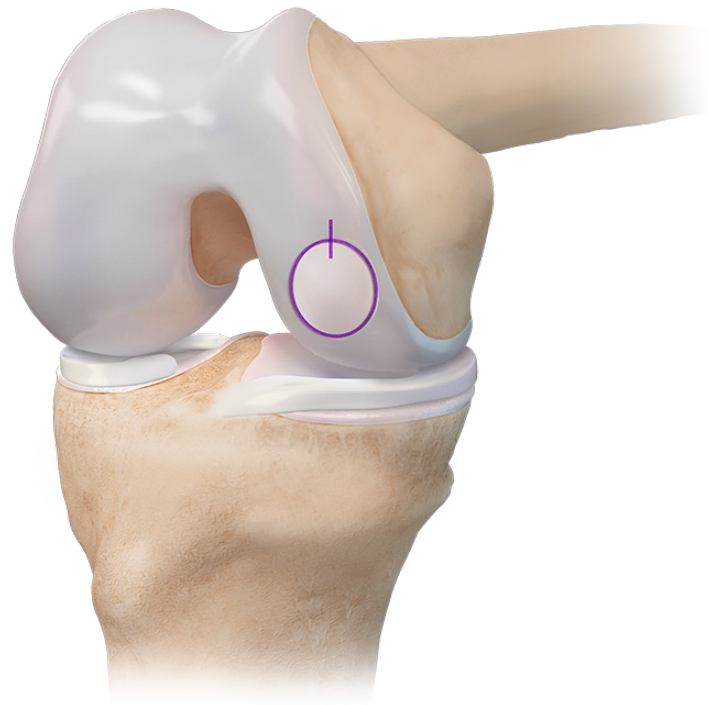


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Materials and Methods



This is a retrospective study of patients who underwent knee surgery due to symptomatic femoral chondral lesions unresponsive to conservative treatment.

We included patients up to 50 years, with compatible symptoms, and at least one high-grade lesion.

Functional scales (IKDC, Lysholm, and KOOS) were measured with an average follow-up of 5.6 years (3-10 years) and their correlation with other demographic variables.

Statistical analysis was performed using t-student test, chi-square, and logistic regression.



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Results

A total of 55 patients between 2013 and 2019 were analyzed. 72.7% were males.

The mean age was 31.9 years (14-50), the mean follow-up was 5.6 (3-10) years, and the mean lesion size was 1.26 (0.5-4) cm². 81.4% of patients required a single plug (the remainder received two plugs - figure 2).

The average functional results were as follows: IKDC 78.1 (34.4 - 100), Lysholm 83.7 (35 - 100), and KOOS 76.2 (38.8 - 100). The main predisposing factor for poorer outcomes was the age at the time of surgery.

The mean IKDC for patients over 35 years was 71.1 compared to 84.4 in younger individuals (p-value <0.01).

Discussion

The study's focus on evaluating the medium to long-term functional outcomes of OAT is crucial for understanding the treatment's efficacy over time. With Good clinical results in the long term (mean follow up of 5.6 years).

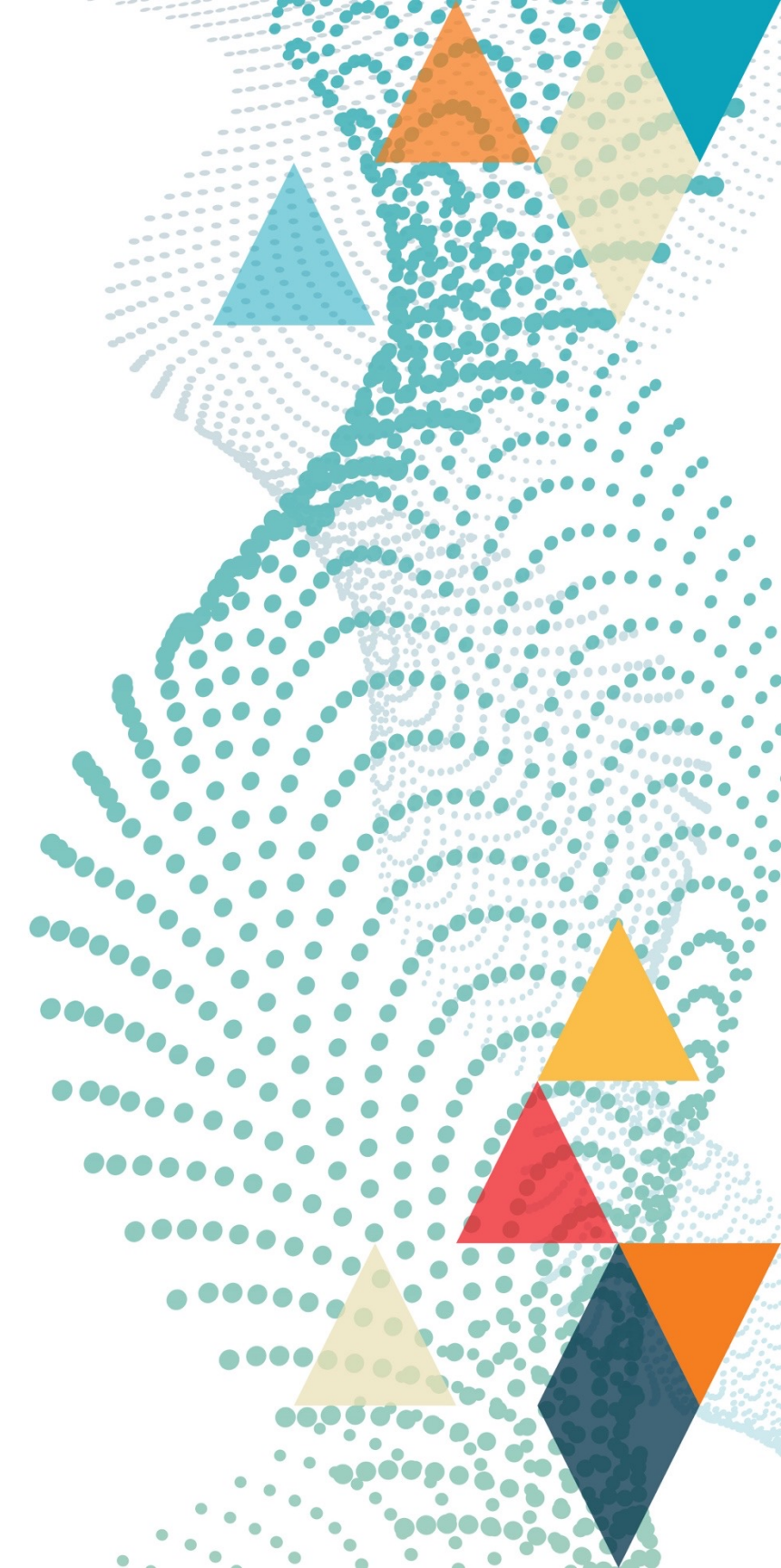
This has been shown in others studies like a sistematic review with a survival rate of 84% at 10 years follow up, and an avarage follow up of 12.3 Years.




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Discussion



The other highly relevant data, which is also well-known, is that patients under 35 years old had better functional outcomes. This highlights the fact that as time passes, this tool should be used more cautiously.



We highly recommend this usefull tool, in the facing of a acute cartilage lesion of less than 2-3cm²



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Conclusions

Autologous osteochondral transplantation proved to be an effective treatment option for patients with symptomatic femoral cartilage lesions..

. Functional outcomes in the medium and long term were positive, with a significant improvement in the quality of life of treated patients

The patient's age at the time of surgery was identified as an important factor influencing functional outcomes, highlighting the importance of early intervention in young patients with cartilage lesions

However, further studies with larger sample sizes and longer follow-up are needed to confirm these findings and further optimize the results of autologous osteochondral transplantation in the femur.



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