

Arthroscopic cystectomy and valve excision of popliteal cysts complemented with management of intra-articular pathologies: a low recurrence rate and good functional outcomes in a series of ninety seven cases

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INTRODUCTION

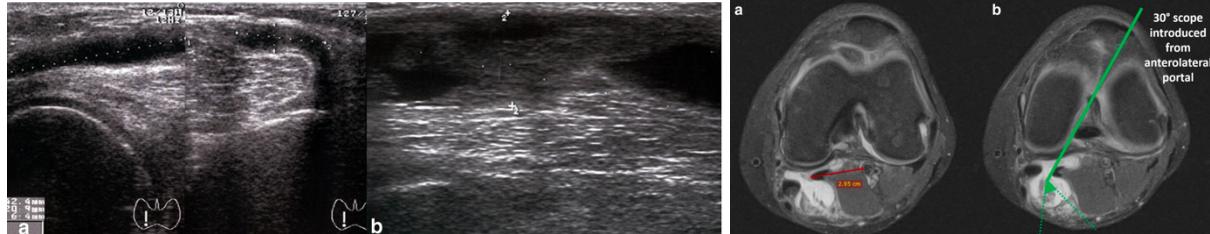
Arthroscopy in popliteal cyst surgery enables addressing all components of its pathomechanism: the cyst wall, valvular mechanism, and concomitant intra-articular pathologies. Techniques differ as to the management of the cyst wall and the valvular mechanism. This study aimed to assess the recurrence rate and functional outcomes of a cyst wall and valve excising arthroscopic technique with concurrent intra-articular pathology management. The secondary purpose was to assess cyst and valve morphology and concomitant intra-articular findings.

METHODS

Between 2006 and 2012, 118 patients with symptomatic popliteal cysts refractory to at least three months of guided physiotherapy were operated on by a single surgeon using a cyst wall and valve excising arthroscopic technique with intra-articular pathology management. Patients were evaluated preoperatively and at a mean follow-up of 39 months (range 12–71) by ultrasound, Rauschning and Lindgren, Lysholm, and VAS of perceived satisfaction scales.

RESULTS

Ninety-seven out of 118 cases were available for follow-up. Recurrence was observed on ultrasound in 12/97 cases (12.4%); however, it was symptomatic only in 2/97 cases (2.1%). Mean scores improved: Rauschning and Lindgren from 2.2 to 0.4, Lysholm from 54 to 86, and VAS of perceived satisfaction from 5.0 to 9.0. No persistent complications occurred. Arthroscopy revealed simple cyst morphology in 72/97 (74.2%) and presence of a valvular mechanism in all cases. The most prevalent intra-articular pathologies were medial meniscus (48.5%) and chondral lesions (33.0%). There were significantly more recurrences in grade III–IV chondral lesions ($p = 0.03$).



CONCLUSION

Arthroscopic popliteal cyst treatment had a low recurrence rate and good functional outcomes. Severe chondral lesions increase the risk of cyst recurrence.

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