

RESULTS OF TREATMENT OF PROXIMAL FEMUR BENIGN CYSTIC LESIONS BY CURETTAGE AND AUTOLOGOUS NON VASCULARIZED FIBULAR STRUT GRAFT

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Introduction

The proximal femur is a common site of benign cystic lesions in either tumor or tumor-like conditions. Common benign lesions include giant cell tumor, enchondroma, aneurysmal bone cyst, and simple bone cyst. Some of those lesions are discovered accidentally during radiological investigation for other purposes. However many of these lesions may present with pain, limbing and pathological fracture. In planning for the management of such lesions, three important points should be considered: first, to prevent deformity and pathological fracture; second, control the biological behavior of the disease; and third, post management protection of the proximal femur either externally by a spica cast or internally by osteosynthesis. Treatment of these lesions usually entails curettage, with or without the use of adjuvants to control local recurrence of some lesions. The resultant defect could be left to heal without refilling or it is filled with autogenous, allogenic, or synthetic bone graft with or without osteosynthesis.

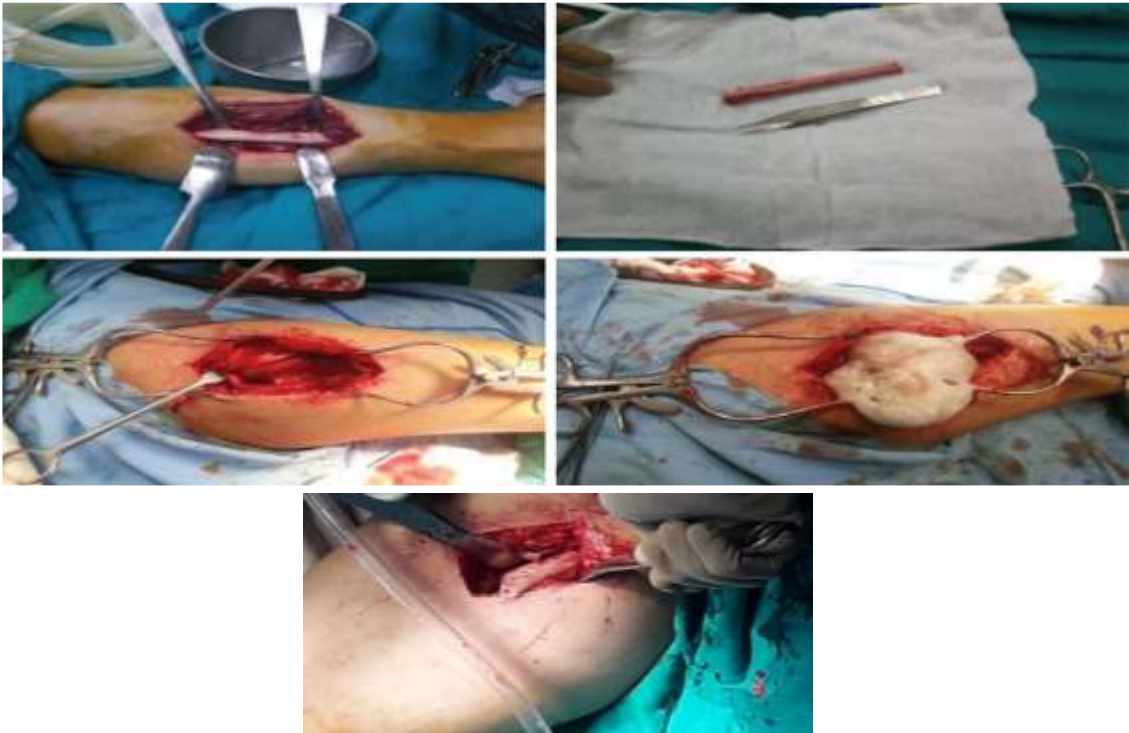
Aim of the work

The aim of this retrospective study is to evaluate the results of treatment of benign cystic lesion of proximal femur by curattage and use of non vascularized autologous fibular strut graft.

PATIENTS:

A retrospective study of 20 patients CBL of proximal femur patients. The cases were evaluated after management of benign cystic lesion of proximal femur for functional outcome on reconstruction using non vascularized bone grafting. All cases were done in the period between 2018 and 2021, in El-Hadara University Hospital.

Fig.(1):Harvestingofthefibularstrutgraftsubperiosteally(a),thegraft(b),exposureoftheproximalfemuran dopeningadequatewindowforcurettage (c), use of hydrogen peroxide as an adjuvant for local biologicalcontrol(d). Graft impaction (e)



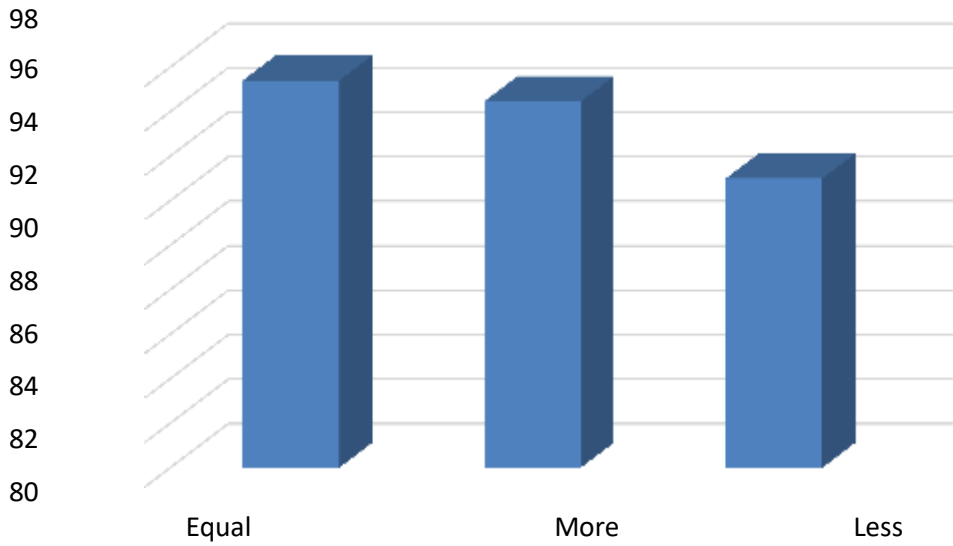
ASSESSMENT

The follow up done regularly for 6 month to 24 month (mean time 18 month) at close interval so as to achieve good outcome of bony union, avoidance risk of recurrence, limited range of motion or disability (functional outcome of the limb). Evaluate clinical and radiological result of the resection and reconstruction of benign cyst lesion of proximal femur using non vascularized fibular bone graft.

Results

The result of our study showed that the final outcome had no significant relation with sex, cast while it showed a significant relation with size the less size show a significant increase in total score more than of equal and more. The incidence of pathological fracture affect on the final outcome. The patient with fixation shows a significant decrease in final outcome. The patient with recurrence showed a significant decrease in final outcome. Relation between final out come and size of tumor: The Musculoskeletal tumor society (MSTS) scoring system in less was 97.40±0.89 and in equal was 96.46±1.94, while in more was 93.0±4.2, there was a significant decrease in score in more size more than the less and equal (p<0.05).

Fig.(2):Relation between size and fina loutcome.



Final out come	Sex	
	Male	Female
Range	96.00-98.00	90.00-99.00
Mean	96.90	95.80
S.D.	0.9	2.9
T	1.231	
p	0.282	

Table (1): Relation between sex and final outcome.

Conclusions

The proximal femur is one of the common anatomical sites of benign bony lesions. In planning for the management of such lesions, three important points should be considered: first, to prevent deformity and pathological fracture; second, control the biological behavior of the disease to prevent local recurrence in the long term; and third, post management protection of the proximal femur either externally by a spica cast or internally by osteosynthesis, which protects against pathological fracture. For control of the biology of the underlying pathology, we used hydrogen peroxide lavage as cytotoxic to control local recurrence, which we believe worked, as no local recurrence occurred until the last follow-up.