

Management of a Baker's Cyst by a Conservative Regimen

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A baker's cyst is a cyst formed by distention of a popliteal bursa. Most commonly it involves the gastrocnemiosemimembranosus bursa. The probable etiology is repeated trauma due to constant friction between adjacent muscles and all ages are affected with males more predominant. It may occur bilaterally. Gradually, a cystic, turgid, painless, moveable swelling appears in the popliteal fossa, most commonly at the medial side. Extension of the knee joint results in an increase in the capacity to visualize the geometric relationship of the cyst within the popliteal topography.

Occasionally, vague symptoms of pain may present with a more characteristic complaint of a "giving way" of the knee. In the event of a greater cyst size, full extension of the knee is often limited. As a rule, no pain is elicited upon palpation. Digital pressure on the surface of the cyst may result in some fluctuation. The overlaying integument is not adherent to the cyst and a clear, viscid fluid is obtained upon aspiration. Appropriate radiographic projections of the knee often reveals a globular shadow representing a greater density compared to surrounding soft tissue components.

Although, it is probable that synovectomy will eventually be the treatment of choice, in the interim, conservative care for the acute, early cyst formation may include rest, application of a cold compress with sufficient compression to enhance reduction of edema, or transudate, in addition to elevation of the extremity. Following approximately 72 hours of rest, ice, compression, and elevation, the regimen may substitute ice with moist heat to enhance absorption, or contrast therapy may accomplish the same clinical goal. Also, the application of pulsed hydrocortisone/lidocaine ointment phonophoresis at 0.75 to 1.0 W/cm² for 10 minutes to each field, p.r.n. This management regimen may continue for about seven to 10 days and be monitored for progress. Should pain persist in spite of these clinical efforts, interferential current may be applied to the lesion. In which case the electrodes should be placed in such a manner as to form an elliptical geometric configuration which encompasses the general area of the turgid mass. If a square or rectangular waveform is applied. It may be possible to achieve a greater milliampere of imposed current with less distress to the patient -- a desirable goal. This information was obtained from three individual bio-engineers serving at three different medical complexes over the past several years. In any event, the IFC may be applied p.r.n. for pain modulation.

If the history is one of chronicity, the bursal wall may become thickened by fibrosis. Small accumulations of fibrin, in the form of villi, folds, and small loose bodies, may form inside the synovial cavity resulting in a persistent, tender, painful turgid cyst. Synovial cystectomy is commonly necessary with a chronic history. Usually, a new bursa will reform following excision.

Any infections which present in the clinical findings during the course of the history must be treated with appropriate antibiotic therapy. Referral to an orthopedic surgeon for consultation is recommended.

References

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