

Minerva Access is the Institutional Repository of The University of Melbourne

Author/s:
Choong, PFM

Title:
Shoulder to knee: lessons learnt

Date:
2017-05-01

Citation:
Choong, P. F. M. (2017). Shoulder to knee: lessons learnt. ANZ Journal of Surgery, 87 (5), pp.325-. <https://doi.org/10.1111/ans.13968>.

Persistent Link:
<https://hdl.handle.net/11343/292830>

Shoulder to knee. Lessons learnt

Professor Peter F.M. Choong

MD FRACS

University of Melbourne, Department of Surgery, St. Vincent's Hospital Melbourne

pchoong@unimelb.edu.au

Post-surgical problems can be distressing to patients and surgeons alike. Sometimes the solutions are more complex than what was required to deal with the initial problem. Knee stiffness is one of those bugbears. Almost 10% of all knee replacements are associated with post-operative knee stiffness. There are many causes for this and some have far greater long term implications than others, for example, infection, prosthesis mal-alignment or oversizing of components. Thankfully, these form the minority. For the most part, knee stiffness can be dealt with through a combination of motion exercises, pain management and patience. With diligence, stiffness does improve. However, not all patients tolerate this combination well, and face a range of surgeries with escalation of violence, from simple manipulation under anaesthesia to full revision of implants. Even manipulation under anaesthesia may not be straight forward with femoral fractures being reported. Whatever the solution may be, desperation is something both patient and surgeon will feel.

A controversial issue is deciding when to intervene with a stiff knee. Harder still is what to do when stiffness is still a problem many months after surgery. In today's age, under the constant scrutiny of funders, institutions, and surgical peers amongst others, surgeons are aware of the problems of over servicing, iatrogenic problems, and working in an evidence free zone. Managing the stiff knee after total joint replacement is one of those chestnuts.

Formby et al¹, have reported a simple approach that leverages the established experience with frozen shoulders, namely, hydrodilatation. In frozen shoulders, the painful restricted range of motion is relieved by dilating the shoulder joint with sterile fluid. The fluid serves to "tear" joint adhesions in all directions as the fluid balloons outward stressing all parts of the joint capsule. This procedure can be done both in theatre or in a radiology suite. The latter is more common.

Interestingly, hydrodilatation of the knee, per se, has not been a specific option despite the successes in the shoulder. Usually any form of hydrodilatation is performed in conjunction with arthroscopy and the impact of the distention is missed. Fromby et al., reports a small series from a wider and longer experience showing that up to 20 degrees of additional range can be achieved and maintained following hydrodilatation alone. As in the shoulder, done as a day procedure, under light sedation and without the need for operative instrumentation, hydrodilatation of the knee may be a simple, safe, resourceful and cost-effective means of treating knee stiffness after total joint replacement.

Sometimes the simplest things can be the sweetest.

Reference List

1. Formby PM, Donohue MA, Cannovat CJ, Caulfield JP. Hydraulic distension of the knee: A novel treatment for arthrofibrosis after total knee replacement (case series). ANZJSurg 2016;86:480-482

This is the author manuscript accepted for publication and has undergone full peer review but has not been through the copyediting, typesetting, pagination and proofreading process, which may lead to differences between this version and the Version of Record. Please cite this article as doi: [10.1111/ans.13968](https://doi.org/10.1111/ans.13968)