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Ultrasound Guided Cryoablation of Infrapatellar Branch Saphenous Nerve In Patient with Persistent Knee Pain Post Total Knee Arthroplasty

Chan, Wei Heng
Orthopaedic Surgery and Interventional Pain Management, Loh Guan Lye Specialist Center, Penang, Malaysia

INTRODUCTION:

Total knee arthroplasty (TKA) is one of the most common and successful orthopaedic surgeries for knees osteoarthritis. Despite generally good outcome, it is reported as high as 20% of patients still experienced persistent chronic pain after TKA. Managing persistent pain post TKA is challenging. Current interventional management options available, after failed conservative treatment, are very limited.

REPORT:

Madam Ong presented with persistent knee pain after TKA 6 months ago. The surgery was performed by an experienced senior Orthopaedic surgeon, practicing more than 10 years as Consultant. Patient experienced persistent pain over anteromedial aspect of the knee after the surgery. Possible causes of persistent post TKA pain such as infection, implants malalignment and instability were ruled out. She is self motivated and compliant to post op rehabilitation. However, the pain was not improved. Her quality of life and daily activities were affected.

Patient underwent diagnostic block over infrapatellar branch of saphenous nerve (IPBSN) and Anterior femoral cutaneous nerve (AFCN) under ultrasound guidance. She responded positively, with almost 80% of improvement in pain intensity. With the positive diagnostic blocks, patient underwent cryoablation of both IPBSN and AFCN under ultrasound guidance. Patient has satisfactory and significant improvement in both pain and function.

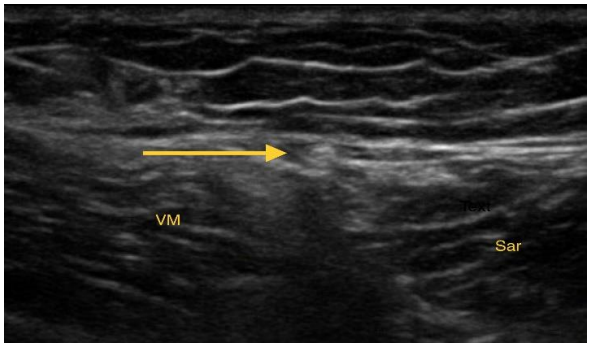

Figure 1: Ultrasound examination of IPBSN (arrow). Sar (Sartorius ms), VM (Vastus medialis)

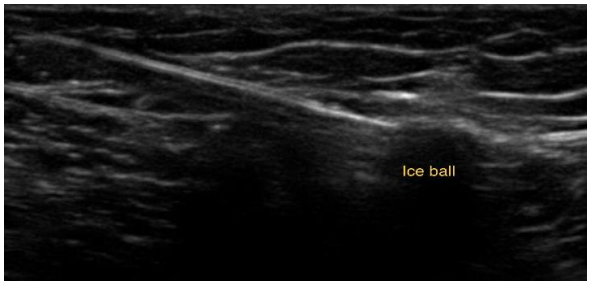

Figure 2: Anechoic signal cast by ice ball formed during cryoablation.

CONCLUSION:

Cryoablation is effective in managing persistent pain post TKA. It is safe and well tolerated. However, the long term outcome is yet to be determined.

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