Plantar fibroma management with intralesional corticosteroid enabling quality physical activity to limit post-menopause risks.

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Background

This presentation describes the impact of plantar fibromatosis (PF) on foot and Achilles tendon pain in a woman aged 53 and highlights the importance of enabling good quality physical activity in menopause, to reduce the associated longer term impacts of increased cardiovascular disease risk, osteoporosis, muscle wasting and depressed mood[1].

The average age of menopause is 51 but the age range for naturally occurring menopause is 45-55 years, with some women experiencing menopause in their 60s.[4,5]

Perimenopause refers to the 8-10 years before menopause.
Oestrogen levels generally decline in an irregular fashion
Menopause refers to the time when menstrual periods have stopped for at least a year
Progesterone production ceases after the final menstrual period
Postmenopause commences 12 months after menstrual periods have ceased
Testosterone production declines with ageing but continues after menopause

"Plantar fibromatosis (Ledderhose disease) is a rare, benign, hyperproliferative fibrous tissue disorder resulting in the formation of nodules along the plantar fascia.
This condition can be locally aggressive, and often results in pain, functional disability, and decreased quality of life"[2].
Occurs typically in people aged 40 – 50 years, more common in men and bilateral involvement in 20–50% of cases[3].

Image[3]

Alex is a physically fit woman with an 11-year history of PF affecting both feet. The nodules involving the plantar fascia medial band had been slowly increasing in size and becoming more prominent. She has a familial history of Dupytren's contracture (maternal grandmother and uncle) but has no hand involvement herself. Alex experienced pain and numbness in her feet when cycling for more than 20 minutes. Impact exercise was limited to a gentle 5km jog three days a week due to foot pain and Achilles tendon pain bilaterally.

"My ability to do exercise is becoming increasingly limited. It is frustrating because exercise has always been important to me, not just physically but for my mental wellbeing and stress relief".

Treatment

Ankle block anaesthesia enabled plantar infiltration of the fibroma using 5mL Triamcinolone acetonide 10mg/mL.

2 weeks post-injection illustrates significant reduction in density and prominence of the fibroma.

5 weeks after the first treatment: 2nd administration of 5mL Triamcinolone acetonide 10mg/mL to proximal aspect of the fibroma.

Plantar fibroma on the right foot was smaller and responded well to one 5mL injection of Triamcinolone acetonide 10mg/mL.

Outcomes and relevance for practice

All fibromas responded well to treatment, becoming less prominent and more malleable. Alex experienced a gradual reduction in pain from the treated sites, improved extensibility of the plantar fascia, and reduced Achilles tendon pain. At 17 weeks following the final injection, Alex reports:

"I have gradually built up my running and cycling - I can push myself again. I can now easily run 10km but more importantly, I am running intervals of 200km, doing bike hill intervals and endurance bike rides without pain".

The significance of improving Alex's capacity for physical activity and exercise is particularly important considering her age; she identifies as being at the stage of postmenopause. Podiatry interventions which **enable women to maintain good quality physical activity** will **assist in maintaining muscle strength and power**, **reduce the risk of falls and falls-related injury**, **protect** against the longer-term **impacts of menopause including osteoporosis and cardiovascular disease**, and **improve quality of life** related to foot health.

References

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