HAEMOPHILIC ANKLE ARTHROPATHY: CASE REPORTS AND REVIEW OF THE LITERATURE
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INTRODUCTION:

Although the introduction of plasma concentrates in early 1970s strongly changed the management as well as the presentation of the disease, haemophilic arthropathy remains an important concern for the physicians and the patients (1). The most affected joint is the ankle, followed by the elbow and then the knee (2). Repeated joint bleeding causes damage to the bone, cartilage and synovium, by inducing degenerative and inflammatory processes (3).

PURPOSE:

<table>
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<tr>
<th>CASE 1</th>
<th>CASE 2</th>
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<tr>
<td>53 year old man</td>
<td>54 year old man</td>
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<tr>
<td>Left ankle suffering from haemophilic arthropathy since 10 years</td>
<td>Right ankle suffering from haemophilic arthropathy with a symptomatology that has been increasing for the last two years</td>
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<td>Moderate pain, reduced mobility</td>
<td>Pain increases, no lameness</td>
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METHOD:

We investigated different aspects of the management by reviewing literature to take stock on the different treatments.

RESULTS:

Exercise: we explored the Cochrane database of systematic review (4). It was difficult to pool the results because of the heterogeneity of outcome measures. Strength, walking tolerance, range of motion and pain were improved with the exercise. Hydrotherapy seems more effective than land exercises for pain reduction. Functional exercises appear to be more effective than the static ones for strength improvement. A randomized controlled trial lead to a better ankle pain relief with a manual therapy program rather than with educational sessions and home exercises (5).

Orthoses and insoles: there was a decrease in bleeding events after 1 year of use (6) and a decrease in pain felt for most patients (7), regardless of biomechanical changes observed with the orthopedic shoes (7). There was no changes in the ankle mobility and in the X-ray findings (6).

Radiosynovectomy: safe, well tolerated and easy. It can reduce the number of intra-articular bleedings (8, 9, 10, 11, 12). Various agents have been used. Radiosynovectomy seems to be effective on joint pain, number of bleeding episodes, degree of clinical synovitis and clinical score of the World Federation of Haemophilia (11).

Arthroscopic synovectomy: results similar to those of radiosynovectomy (13). A maximum of three radiosynovectomies with a 3 to 6 month interval is usually proposed. If the synovitis fail to be halted after that, the arthroscopic synovectomy seems to be indicated (13).

Platelet rich plasma: only 2 studies were found. Both describe a significant decrease of pain (14, 15), but none of those two were controlled.

Hyaluronic acid injection: very few studies, mainly for the knee. It seems to be an effective option with often good clinical results leading to a delay in surgical option (16, 17).

Corticosteroid injections: frequently discussed in clinical practice. Recently, a review was performed by Rodriguez-Merchan (18). As there is no consensus about pain relief after corticosteroid injections and that treatment costs required for this technique with haemophilic patients are quite heavy, he concludes that routine corticosteroid injections in haemophilia is not recommended. Although the X-ray are well validated for the diagnosis, literature reveals that ultrasounds represent a good way to detect and monitor osteochondral changes and synovial hypertrophy in haemophilia (19).

CONCLUSION:

For the conservative management of the haemophilic ankle arthropathy, we recommend:

Exercise, preferably functional exercises | Try ankle or ankle-foot orthosis for pain relief | Radiosynovectomy, with a maximum of 3 attempts | Arthroscopic synovectomy if needed | More studies are needed to find out if intra-articular injections could be beneficial |

BIBLIOGRAPHY:

Bibliography is comprised of 19 articles, available at request