Baron Dupuytren, Vikings & Xiapex

Miss Shamim Umarji MA (Oxon) FRCS (Trauma & Orth)
Consultant Orthopaedic & Hand Surgeon

Digital contractures had previously been reported by Sir Astley Cooper (1768-1865) but it is the French Napoleonic surgeon, Baron Dupuytren (1777-1835) who is commonly credited for first describing this condition which is a benign proliferative disease that affects the fascia of the palm and digits resulting in nodules, cords and contractures. It was Dupuytren who first realised that the basic lesion lay in the palmar fascia rather than the skin or tendons and for that he deserves recognition.

Tradition has it that the disease originated with the Vikings who in 865 landed on England’s east coast raiding the monastery of Lindisfarne and as they travelled and intermarried across Northern Europe, Dupuytren’s disease was spread far and wide. There seems to be a genetic predisposition with variable autosomal dominant penetrance. Historically it was believed that there was an association with diabetes, epilepsy and the ‘good life’ (smoking, drinking) but recent evidence has shown no statistically significant correlation.

Evaluation & Treatment

Treatment is required when Dupuytren’s disease begins to affect the patient’s activities of daily living and this is usually when digital contractures occur such that the patient can no longer get the palm and digits flat onto a table (positive Hueston’s tabletop test). Occasionally treatment is indicated for very tender nodules.

Severity of Dupuytren’s Disease & Treatment

<table>
<thead>
<tr>
<th>Mild Disease</th>
<th>Moderate</th>
<th>Severe</th>
</tr>
</thead>
<tbody>
<tr>
<td>No functional problems</td>
<td>Functional problems Contracture involving MPJ &amp; PIP Positive Hueston’s</td>
<td>Functional problems Severe MPJ &amp; PIP contracture</td>
</tr>
<tr>
<td>Reassure/observe</td>
<td>Fasciotomy</td>
<td>Fasciectomy Dermofasciectomy</td>
</tr>
</tbody>
</table>

Xiapex

The enzyme Clostridium Histolyticum collagenase (Xiapex, Pfizer) is an exciting and new non-surgical treatment for Dupuytren’s Disease. The use of Xiapex has been approved in the UK since 2011, having undergone many years of trials to assess the safety and efficacy of the treatment. It is gradually being introduced into the NHS and has recently become available at St George’s Hospital.

Risks

Localised bruising, swelling, pain, small skin tears and allergic reaction are some of the possible side effects. Three tendon ruptures were reported in a large series of over 2000 injections.

How is it given?

A trained Hand Surgeon will assess each patient for suitability; Xiapex is not suitable for all patients with Dupuytren’s. After consent, Xiapex is injected directly into the Dupuytren’s cord and 24 hours later under local anaesthesia, the finger can be manipulated by the surgeon to rupture the ‘softened’ cord. Occasionally more than one injection is required.

Results: Is it better than surgery?

The early results are very promising and suggest that Xiapex might be an effective alternative to surgery but longer term studies are eagerly awaited.

CORD (Collagenase Option of Reduction of Dupuytrens) I & II were randomised double blind placebo controlled studies involving 374 patients with a contracture. 64% of patients had a successful correction when treated with collagenase compared to 5.4% who received placebo.

“I have used Xiapex in my practice at St Georges Hospital and have been impressed by the early results.”

64% of patients had a successful correction

1 week after injection and manipulation