

TERO KOTKANSALO  
HANNA-STIINA TASKINEN  
NEILL BOOTH  
JAANA ISOJÄRVI  
TUIJA S. IKONEN

JAANA ISOJÄRVI  
Informatician  
The Finnish Office for Health  
Technology Assessment,  
National Institute of Health  
and Welfare  
E-mail: jaana.isojarvi@thl.fi



## ENGLISH SUMMARY

# The effectiveness, safety and costs of collagenase injection treatment of Dupuytren's contracture

Dupuytren's contracture of the palmar fascia is a progressive fibroproliferative disease in which a fibrous cord is formed, causing the affected finger(s) to contract. Injection of collagenolytic enzyme (Xiapex®, Collagenase Clostridium Histolyticum) into the fibrous cord is a new method for treating the disease.

In our systematic literature review, we found nine publications that met our inclusion criteria. We could not find any studies comparing the treatment with surgical treatment.

A 'balance-sheet' -approach was used to highlight differences between collagenase- and surgical treatment, despite differences in the applicability of these treatments based on the extent and severity of contraction. DRG-related price weights and other treatment costs from 2011 were obtained for the purpose of this analysis mainly using data from the Hospital District of Southwest Finland.

According to the literature review, the first injection of collagenase corrected the contracture in the MCP joints in more than half of the patients, but in less than one third of the patients in PIP joints. In total, two out of three MCP joints and one out of three PIP joints were corrected so that they straightened almost fully. The results were better in cases of mild contracture than in severe contractures.

Collagenase treatment caused mild, temporary adverse events to almost all patients. Severe or systemic adverse events were very rare. Antibodies for the collagenase enzyme were found in almost all patients. During research a three-year monitoring period following successful treatment, the disease recurred approximately in every fourth MCP joint and in every second PIP joint.

The health-care-system cost of one collagenase injection is approximately €1 350 and, in the case that only one injection is required, this is less than the estimated cost of surgery at a day-surgery unit of a university hospital (€1 850). The likelihood of successful treatment with one injection is the highest in mild contractures of the MCP joint. However, long-term outcomes related to this treatment are not yet known.