Reviewer's report

Title: Dupuytren's contracture: a retrospective database analysis to assess clinical management and costs in England

Version: 2 Date: 14 January 2011

Reviewer: William Townley

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General

This is a slick analysis of an immense amount of data. The methods and data are well described and the writing is acceptable. There is a lot of detail to process and sometimes the paper seems to lose focus/ get slightly lost in detail. There is some unnecessary duplication of information (see below). The aims are adhered to dutifully but maybe the data interpretation could be more ambitious eg can we reduce costs by encouraging/ enforcing more day case procedures/ do revision digital fasciectomies represent good value for money. I appreciate this may be beyond the scope of the paper but these sort of points could be raised. In the current resource-conscious NHS, this type of analysis is very relevant. I appreciate Pfizer’s involvement in this paper and interest in Xiaflex – I however do not think this poses a conflict of interest for this data.

Major Compulsory Revisions

1. The background section dwells excessively on studies reporting prevalence of Dupuytren’s disease. This is not the main focus of the article and therefore distracts the reader from the main thrust. It could be summarized in one or two succinct sentences. Prevalence is essentially static whereas trends in surgical practice are not.

2. This is an epidemiological study tracking recent trends in surgical management of Dupuytren’s disease. The cost analysis is interesting. The headline figure of #41,576,141 does not seem very much given how prevalent Dupuytren’s disease is. But, the figure stands rather naked on its own – it would be nice to put it in some sort of context, to give the figure meaning e.g. as a proportion of all elective hand surgery or per hospital’s budget or even just the trend i.e. an estimated 2003 cost (at 2010-2011 prices) vs a 2007 estimated cost to see whether the increase in day-case procedures translated into a reduction in costs in 2007.

3. There is no detail on the statistic tests used eg to compare procedure rates between different years and no p values.

Minor Essential Revisions

1. The study analyses costs to the NHS i.e. anticipated cumulative HRG tariffs for
one year, not actual costs of treatment which have not been assessed and which may be completely different to the HRG tariff. This should be made clear.

2. Results paragraph 4. ‘Although the … orthopaedic surgeons performed a wider variety of procedures’. This is incorrect as plastic surgeons performed at least the same variety of procedures as orthopaedic surgeons. It is interesting that general surgeons are still performing fasciectomies.

3. Do the costs include eg physiotherapy/ dressing clinic appointments etc. or are those associated costs coded elsewhere/ buried in some other Department’s costs?

4. There is unnecessary duplication of information between the background and discussion section on the Maravic and Landais study.

5. I question how relevant a per-patient cost for each procedure is give that this is predetermined by the HRG/ procedure code (with minimal according to associated co-morbidity).

Discretionary Revisions

1. Results. The term ‘mean [±SD]’ is repeated excessively, especially as it is stated clearly in the methods.

**Level of interest:** An article of importance in its field

**Quality of written English:** Acceptable

**Statistical review:** No, the manuscript does not need to be seen by a statistician.