# Clinical effectiveness and cost-effectiveness of interventions for the treatment of anogenital warts: systematic review and economic evaluation

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Declared competing interests of authors: none

Published March 2016 DOI: 10.3310/hta20240

## **Plain English summary**

Interventions for the treatment of anogenital warts Health Technology Assessment 2016; Vol. 20: No. 24 DOI: 10.3310/hta20240

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A nogenital warts (AGWs) are small lumps or growths occurring in and around the anus or genital area that can cause local discomfort or bleeding. AGWs are caused by a virus called the human papillomavirus (HPV), which is passed on through close skin-to-skin contact. There are over 100 types of HPV but type 6 and type 11 HPV are the two most common HPVs linked to AGWs. AGWs are one of the most commonly occurring sexually transmitted infections (STIs) in the UK. In 2013, AGWs accounted for 16 out of 100 new STI cases. About 50 out of 100 patients will experience recurrence of AGWs within 1 year of initial clearance of their lesions.

Most people infected with HPV do not develop AGWs. In addition, it can take some time (weeks or months) to develop AGWs after being infected with HPV. Therefore, people can carry the virus without knowing that they are infected and might unknowingly pass on the infection.

Anogenital warts can clear without treatment but the frequency with which the growths clear on their own is not certain. Several treatments are available for AGWs, including creams applied to the skin and more aggressive therapies that break down the growths. AGWs can be difficult to treat and it might take several weeks, or even up to 6 months, of treatment to clear them.

Our review found that, although not the most effective of all of the treatments looked at, podophyllotoxin 0.5% solution (Condyline®, Takeda Pharmaceutical Company Ltd; Warticon® solution, Stiefel Laboratories Ltd) works well at clearing AGWs. It can be applied at home and provides value for money, which makes it a good treatment option. Carbon dioxide laser therapy is a more aggressive therapy that is very effective at clearing AGWs by the end of treatment but it is more expensive and does not offer as much value for money. Other aggressive treatments such as freezing and cutting out the AGWs under a local anaesthetic also work well at clearing AGWs but these are also expensive.

### **Health Technology Assessment**

ISSN 1366-5278 (Print)

ISSN 2046-4924 (Online)

Impact factor: 5.027

Health Technology Assessment is indexed in MEDLINE, CINAHL, EMBASE, The Cochrane Library and the ISI Science Citation Index.

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#### This report

The research reported in this issue of the journal was funded by the HTA programme as project number 12/44/01. The contractual start date was in August 2013. The draft report began editorial review in December 2014 and was accepted for publication in March 2015. The authors have been wholly responsible for all data collection, analysis and interpretation, and for writing up their work. The HTA editors and publisher have tried to ensure the accuracy of the authors' report and would like to thank the reviewers for their constructive comments on the draft document. However, they do not accept liability for damages or losses arising from material published in this report.

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