Acta Obstet Gynecol Scand. 1994 Nov;73(10):809-11.

## Onset and duration of hypoalgesia following application of lidocaine spray on genital mucosa.

van der Burght M1, Schønemann NK, Laursen JK, Arendt-Nielsen L, Bjerring P.

## **Author information**

<sup>1</sup>Department of Anaesthesiology, University Hospital of Aarhus, Denmark.

## **Abstract**

Lidocaine spray is used as a topical analgesic prior to minor surgical procedures performed on genital mucosa. In this study onset and duration of hypoalgesia on the genital mucosa was investigated by spraying lidocaine solution on the mucous membranes of female genitals with subsequent measurements of pin prick pain thresholds induced by argon laser stimulation. A dosage of 50 mg of lidocaine spray was administered to the genital mucosa of the inside of the labiae minora. Repeated measurements of pain threshold were performed until normal sensitivity was reached. Analgesia to 1.5 W laser stimulation was obtained in all volunteers after an average of 2.7 min +/- 1.3 min (s.d.) (Range: 1-4 min). The effect lasted 29.7 min +/- 8.9 min (s.d.) (Range 12-45 min). The application of lidocaine spray produced a painful, smarting sensation which, however, disappeared again after 15-30 seconds. The study suggests that minor surgery should not be performed earlier than 4 min after application of lidocaine spray and it is recommended that it should be remembered that the duration of analgesia varies between individuals and thus may be very short in some patients