

# Effectiveness of a special outpatient clinic that aimed to prevent and speedily treat postoperative hypertrophic scars

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## **Purpose**

Many patients develop hypertrophic scars after surgery. However, efforts to limit this have been lacking. As a result, many patients develop painful keloids and must undergo plastic surgery. Well-established keloids associate with high relapse rates. To improve this situation, we established a special outpatient unit that aims to prevent and speedily treat postoperative hypertrophic scars. In this case-series study, we asked whether this approach effectively limited the growth of postoperative hypertrophic scars.

## **Methods**

All consecutive patients who underwent lower abdominal surgery in the Obstetrics and Gynecology Department were enrolled retrospectively. After epithelialization, all scars were treated with silicone gel sheets or paper tape. Seven days after surgery, the scars were scored in terms of induration, redness, vertical and horizontal growth, and spontaneous and pressing pain and itch using the Japanese Scar Workshop (JSW) Scar Scale. Scoring was repeated at 1–3 month intervals for 1 year. If hypertrophic scars developed, treatment with steroid tape/plaster or injections was started immediately. If the lesions were refractory, surgery followed by steroid tape/plaster therapy or irradiation was performed. The primary outcomes were time to treatment and frequency of relapse.

## **Results**

The incidence of postoperative hypertrophic scars after 1 year in the patients with longitudinal and transverse incisions was 30% and 20%, respectively. In all cases, hypertrophic scar growth could already be detected 1 month after surgery. Treatment

started on average 1 month after surgery. Treatment resolved all cases of hypertrophic scarring.

### **Conclusions**

The special outpatient clinic effectively detected the lower abdominal scars that would exhibit hypertrophic growth. It was possible to predict the scarring outcome 1 month after surgery. This early detection, followed by assertive treatment, helped to rapidly resolve abnormal scar growth.