

## Changing surgical practices associate with morphological changes in keloid formation

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In general, surgery rarely causes the formation of abnormal scars like keloids and hypertrophic scars. Here we report that the changes in surgical procedures in our hospital over the past decade associate with morphological changes in keloid formation. Thus, previously, abdominal surgery usually involved a midline abdominal incision. These wounds sometimes turned into severe keloids that are difficult to treat. This problem has improved recently with the development of laparoscopic surgical techniques for various surgical fields. Nevertheless, we still see patients who developed mushroom-like scarring in the umbilicus after abdominal surgery in particular. Since these keloids generally form a localized mass, plastic surgeons can treat them with umbilical plastic surgery. The frequency of surgical treatment of umbilical keloids is expected to increase in the future. Surgically treated umbilical keloids should be treated carefully to avoid recurrence.