

What is wound dehiscence?

When a surgical wound heals properly, the sutures around its edges stay intact while new tissue, known as "granulation tissue," starts forming. One of the most common complications of surgical wounds is when the surgical incision breaks along the suture. In other words, the wound splits open, which is known as **wound dehiscence**.

Wound dehiscence can be caused by many things such as age, diabetes, infection, obesity, smoking, and inadequate nutrition. Activities like straining, lifting, laughing, coughing, and sneezing can create increased pressure to wounds, causing them to split.

Chronic use of corticosteroids, previous scarring, the presence of radiation at the incision site, improper stitch usage, unsuitable suture type, fluid-coagulant balance, cancer, and surgical errors can also contribute to wound dehiscence.

Dehiscence can also occur due to poor wound undermining throughout the surgery. Wound undermining means that damaged tissue extends under the skin and can't be seen on the surface.



Why does wound dehiscence occur?

Patients diagnosed with Ehlers-Danlos syndrome are more likely to experience dehiscence. Ehlers-Danlos syndrome is an inherited disorder that affects connective tissue, particularly skin, joints and blood vessel walls.

The location of the wound can also cause dehiscence. For example, wounds located on the legs, shoulders or back, or in mobile areas or areas prone to high tension, are at increased risk of rupturing.

Symptoms of wound dehiscence

- Broken sutures that don't heal.
- Bleeding from wound and bleeds at the surgical wound entry points.
- Fever.
- Inflammation.
- Pain at the wound site with high sensitivity to touch.
- Sudden opening of the wound.
- Swelling.
- Wound drainage - pus-filled and frothy.

Causes of wound dehiscence

- Abscess - swollen area that contains pus.
- Erythema - abnormal redness of skin.
- High body temperature.
- Large amounts of exudates - seepage from wound area.
- Odor.
- Severe pain.

Treatment of wound dehiscence

- Antibiotics - Use of an antibiotic ointment over a newly sealed wound may prevent any possible future infections.
- Debridement - Removal of any dead or damaged tissue from the surgical wound. Doing so creates a better seal for a new surgical closing. It can also improve the development of healthy skin tissue.