

Complications in the surgical wound

Wound infection

Sources of infection during surgery

- operated infected tissue – drainage of abscess, purulent peritonitis, etc.; causes very common secondary wound infections;
- source in the patient – skin, open alimentary canal;
- contamination of the wound during surgery – by the operating group (hands, droplets) or material;
- from the environment of the room - by air.

Sources in the postoperative period

- unsterile bandaging – often caused by nosocomial strains;
- good conditions for bacteria - contusion, necrotic tissue, hematoma.

Manifestations of infection in the surgical wound

- the inflammation is usually in the subcutaneous tissue;
- wound infection – manifested on the 5th - 6th day after surgery by fever, leukocytosis;

By administering ATB after surgery, we can suppress these symptoms, we will check the result of the treatment only after dressing.

Prevention – compliance with the rules of asepsis and physiological operation;

Treatment

- removal of stitches along the entire length of the wound, opening of the wound and evacuation of pus;
- we leave the wound open under a bandage, or insert a drain into it;
- we can apply anti-inflammatory or disinfectants (Višněvski, Rivanol, etc.);
- we take a sample for cultivation.

 For more information see *Wound infections*.

Bleeding from the surgical wound

The most common causes of bleeding from a surgical wound

- coagulation disorders;
- the consequence of inadequate control of bleeding during surgery;
- slippage of the ligature;
- disruption of the vascular wall by infections.

Clinical picture – blood either flows out from the wound or accumulates under the skin and a hematoma forms.

Prevention

- careful operation, adjustment of coagulation;
- in operations where bleeding can be expected (breast ablation, larger hernia operations), we place Redon drain under the skin.

Treatment

- we can try to stop a slight leakage after the operation with compression (a bandage or sandbag);
- arterial bleeding usually requires revision of the wound and stopping the bleeding with a ligature or with a prick by needle;
- a smaller hematoma can be absorbed, a larger one must be drained.

Dehiscence of the wound

Dehiscence occurs mainly in laparotomy wounds; patients have an increased risk with malignancy, cachexia, protein and vitamin C deficiency, patients obese, icteric.

Causes

- characteristics of the organism (malignancy, immunodeficiency, malnutrition, ...);
- technical error during suturing (wrong incision guidance, drains in the wound);
- wound infection, bleeding;
- drugs – cytostatics and corticosteroids.

Triggering moment – cough, vomiting, meteorism, getting out of bed, ...;

There can be a gap in the entire width with a protrusion of organs or just an opening in some layer:

- dehiscence of the skin and subcutaneous tissue - during premature removal of stitches, during infection and bleeding;
- in case of unrecognized gap of the fascia → hernia in the scar.

Prevention

- elimination of causes already before surgery (if possible);
- postoperatively – suppression of cough, prevention of vomiting (probe), teaching the patient to hold his stomach when coughing.

Treatment

- skin dehiscence - resuture, cure of infection, ...;
- dehiscence of the entire wound - resuture always necessary.

Wound necrosis

Causes – the skin is stripped of the subcutaneous tissue, sutured under great tension;

Clinical picture – purple coloring of the edges, later they turn black;

Treatment – loosening of sutures, excision of necrotic tissue.

Inflammation of the skin and around the wound

Causes – disinfection, plaster, discharge of secretions from the wound (mainly with stoma);

Prevention

- before the operation, we ask about allergies to disinfectants, plasters;
- we try to remove secretions actively (drainage);
- we lubricate the skin around the drains with protective agents;

Treatment – removing the cause, washing with chamomile solutions, oil, glycerine, liquid powders, ...

Links

Source

- BENEŠ, Jiří. *Studying materials* [online]. [cit. 2012-06-26]. <<http://jirben2.chytrak.cz/chirurgie.htm>>.

References

- ZEMAN, Miroslav. *Special surgery*. 2. edition. Prague : Galén, 2006. 575 pp. ISBN 80-7262-260-9.