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SCaLPEL project

Case report: double SCIP flap reconstruction of lower extremity defect

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SCIP/groin flap (the superficial circumflex iliac artery perforator flap)

Key notes

Tissue: Skin and fat / osteocutaneous variation (ASIS). The first skin free flap ever performed - Koshima 2004.

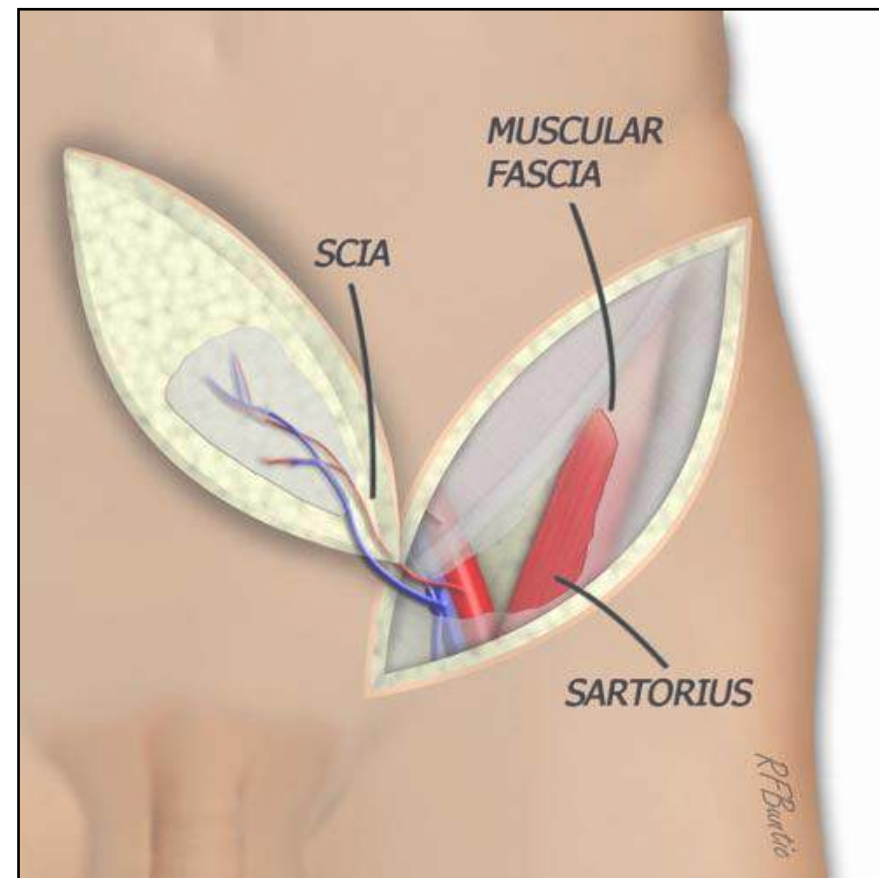
Innervation: Not sensate.

Blood supply: Superficial circumflex iliac artery from the external iliac/superficial femoral artery.

Artery: Small caliber of 1 to 2 millimeters.

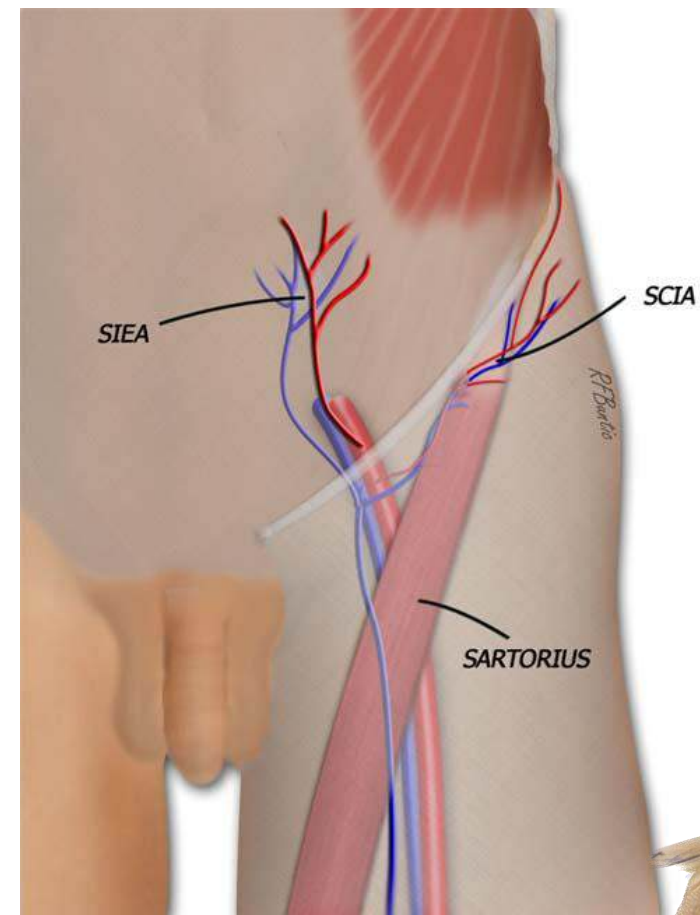
Vein(s): Drained by the cutaneous vein, slightly larger in size than the artery. The vein usually drains into the saphenous system.

Pedicle length: From 2 to 5 centimeters. Length depends on size and position of the skin paddle. Not a flap to choose if you want a long pedicle.



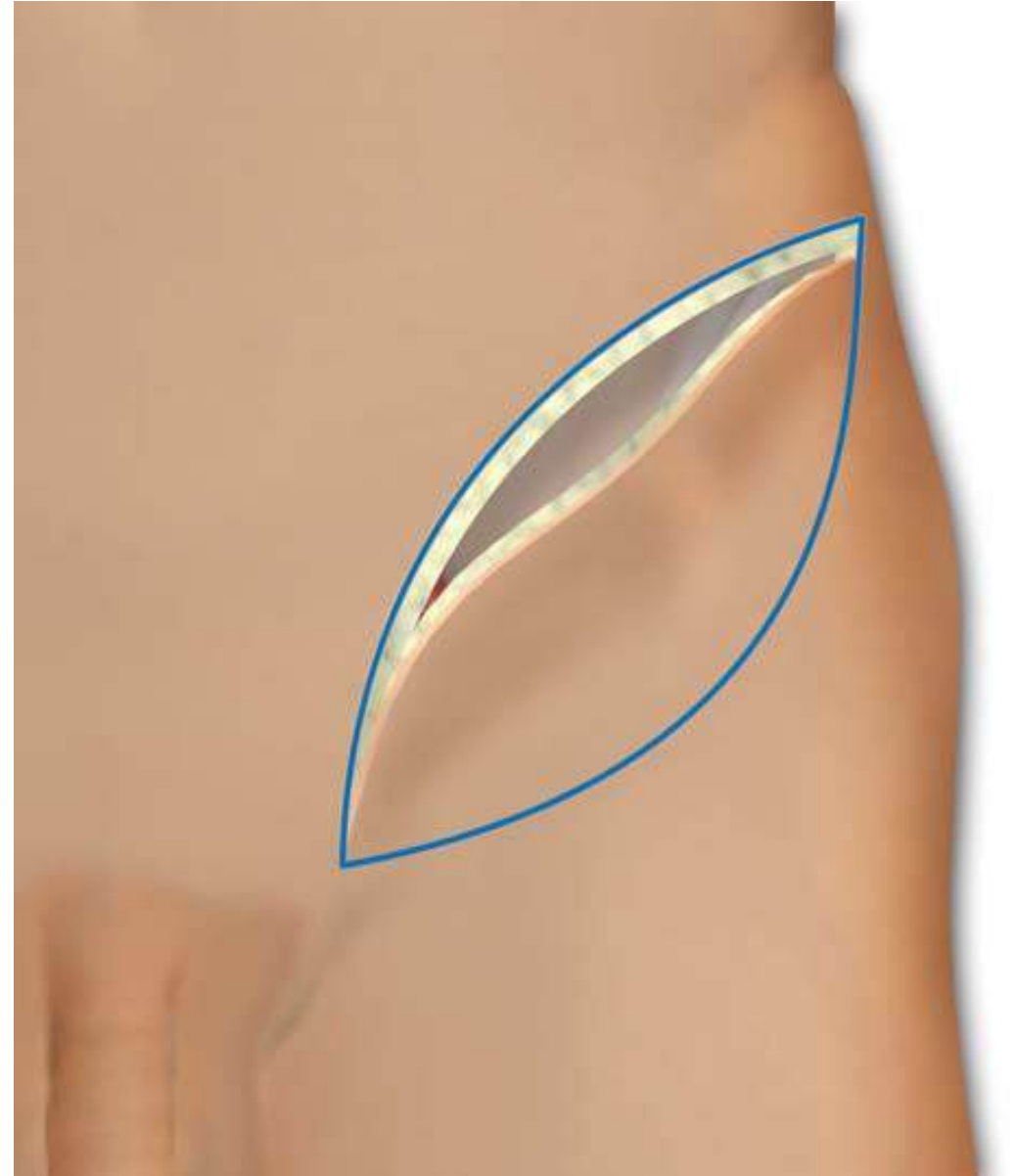
Operative procedure

- The patient is placed supine
- The sartorius muscle, inguinal ligament, and iliac crest are all identified and marked to determine flap design.
- A pencil Doppler is used to determine the location of the arterial pedicle, usually approximately a finger breadth below the inguinal ligament.
- The maximum width of the design is determined by pinching the skin to assess the potential tension of the closure after flap harvest.



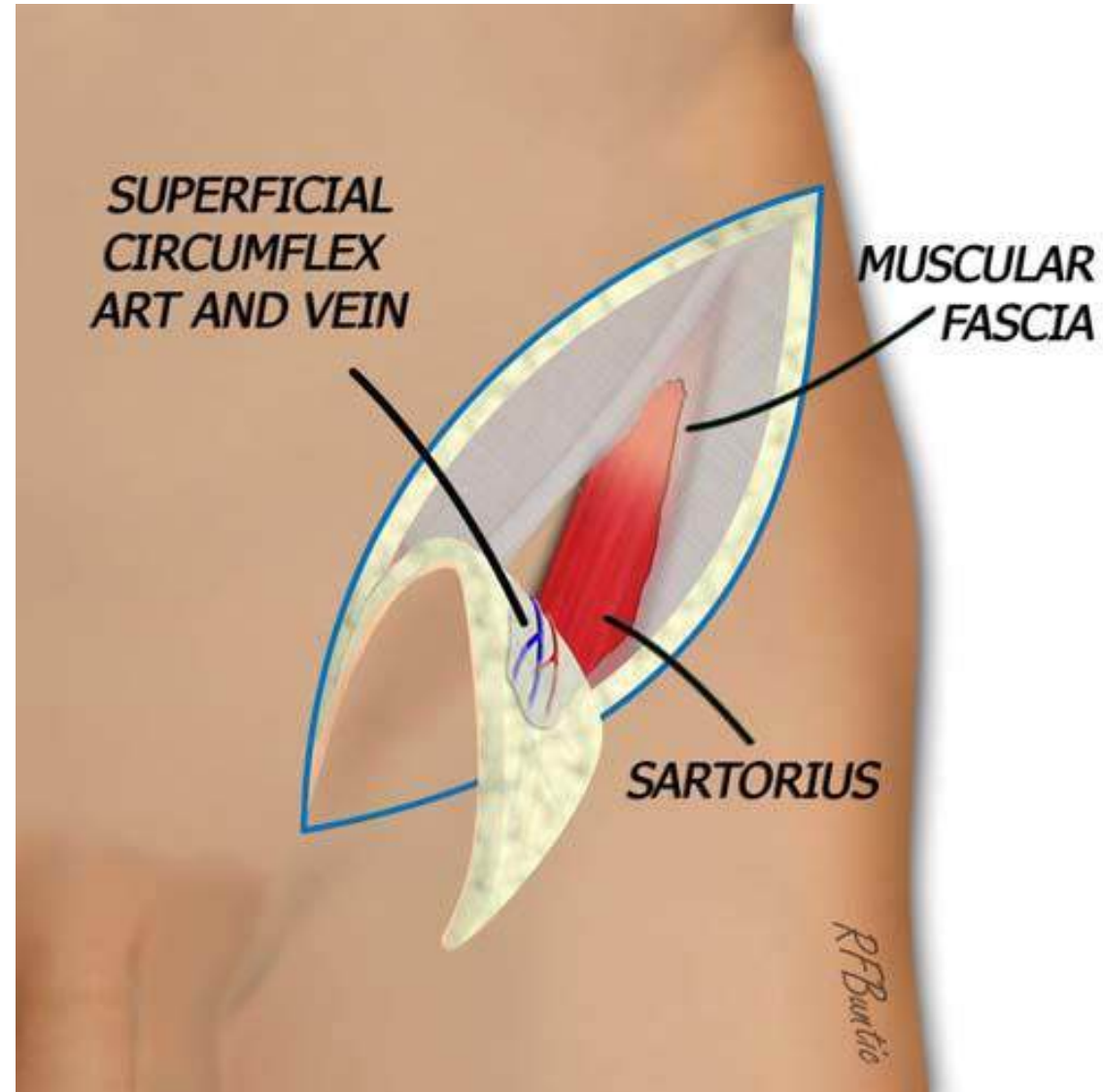
Operative procedure

- The flap dissection can be begun medially or laterally.
- The incision is carried down to the deep fascia and the dissection begun over the deep fascia, identifying and ligating perforating vessels as one proceeds medially.



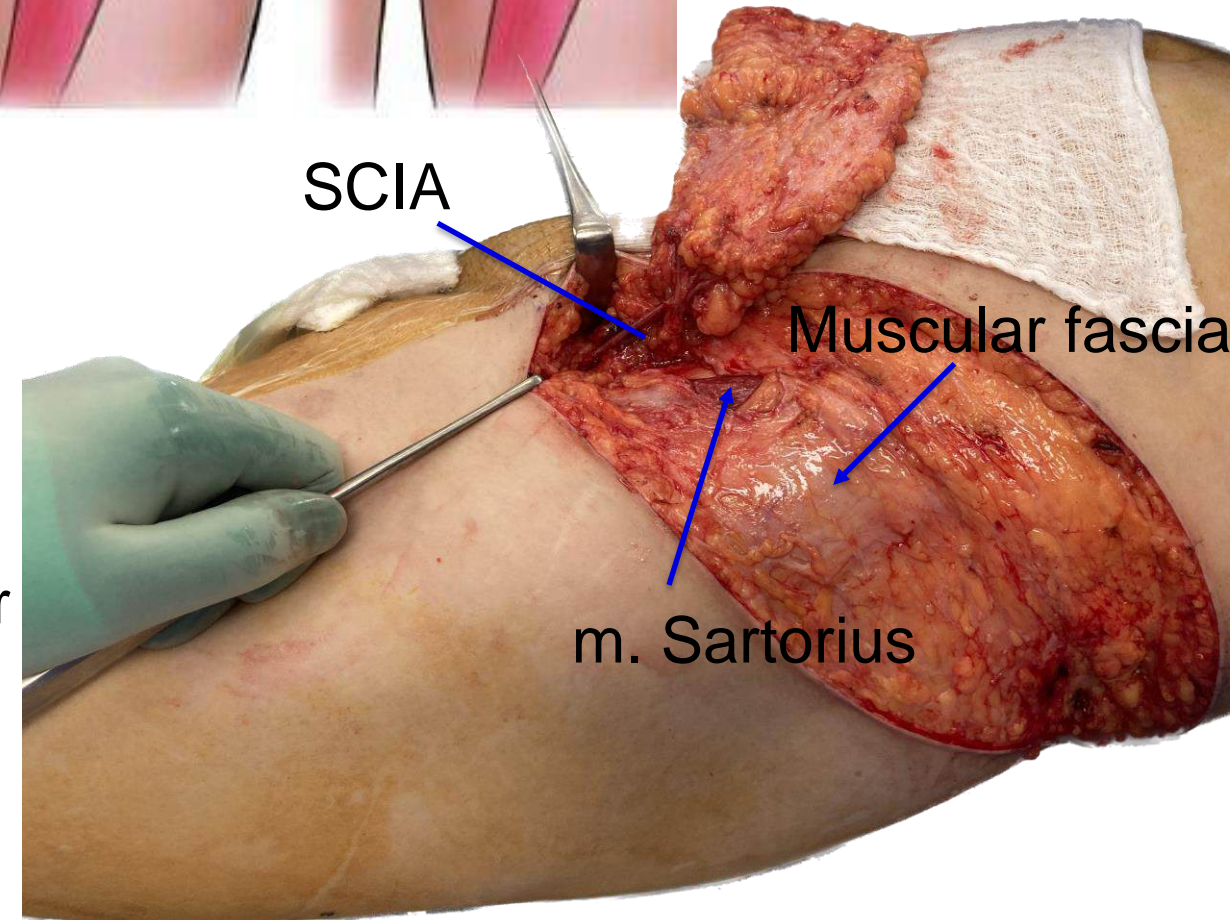
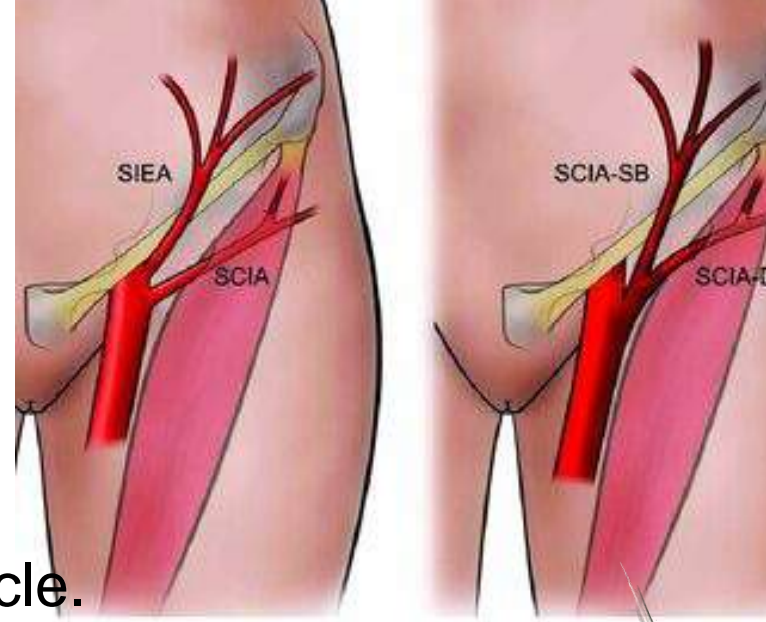
Operative procedure

- The Sartorius muscle is a key landmark in dissection.
- When the lateral aspect of the muscle is identified, the muscular fascia is incised along the lateral aspect, and the flap elevation plane is now conducted deep to the muscular fascia.
- Proceeding medially, the SCIA become visible in the plane above the Sartorius heading into the muscular fascia.



Operative procedure

- The flap is mobilized on the vascular pedicle.
- The artery may arise directly from the femoral vessel or from the trunk of a parent vessel supplying the SCIA and the DCIA.
- The artery can also arise from a common trunk that gives off the SIEA.
- The vein will arise from the saphenous vein or from a branch off the superficial femoral vein.





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- Male
- 30 years old
- Anamnesis: hepatopathy, toxonutrive epilepsy, subclinical hypothyroidism, hyperlipidemia, gastroesophageal reflux disease
- Medication: 0
- Smoker - 20 cigarettes/day
- Allergies: 0

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- Recent illness: On July 18, 2023, the patient was injured by a machete stuck in the dirt, there was a cut in the 4th interdigitation of the left lower limb, he was treated at the surgery of the regional hospital, then he developed phlegmon, sepsis with MODS and was hospitalized at the anesthesiology clinic.
- After repeated necrectomies, local therapy and in a stable condition, he was transferred to the burn and plastic surgery clinic of the Brno University Hospital for reconstruction of the defect 4%TBSA.

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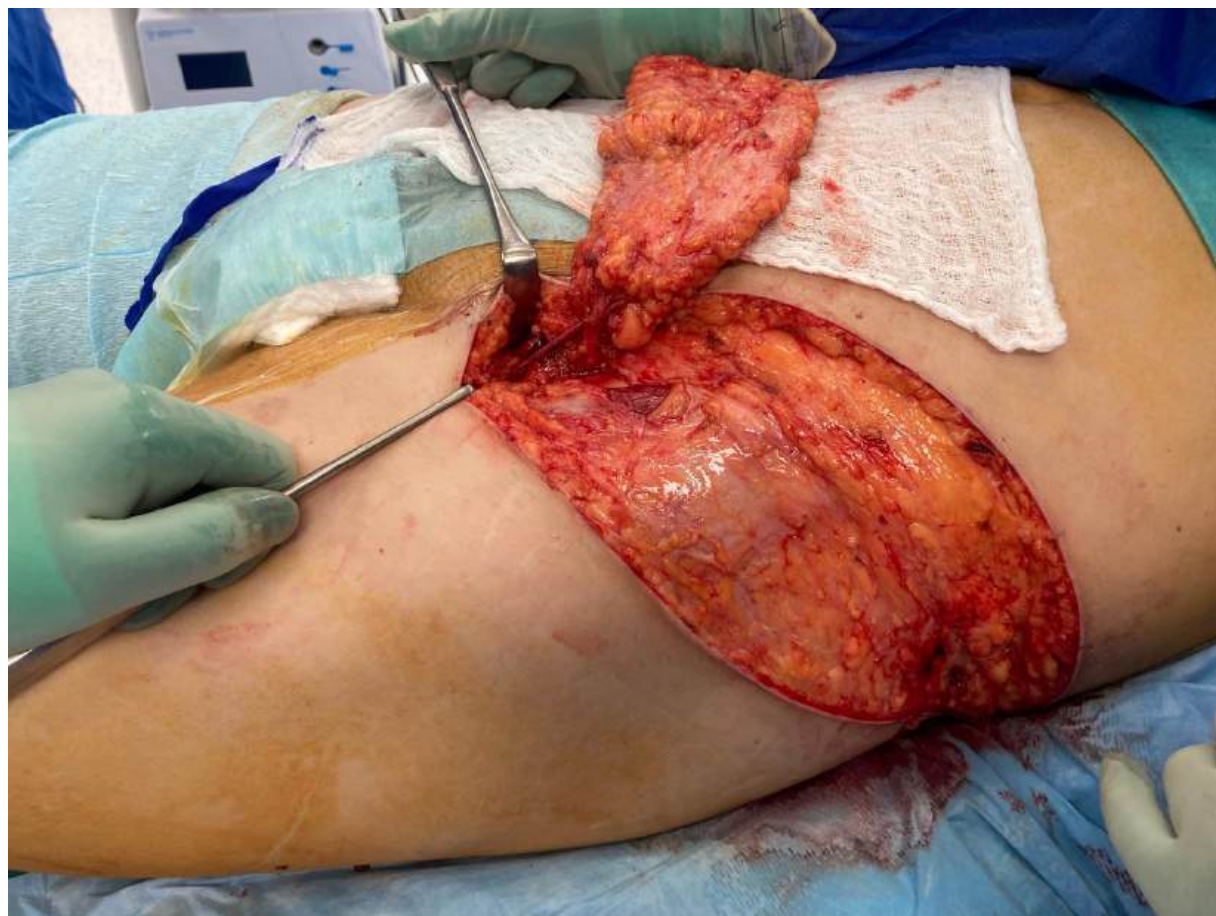
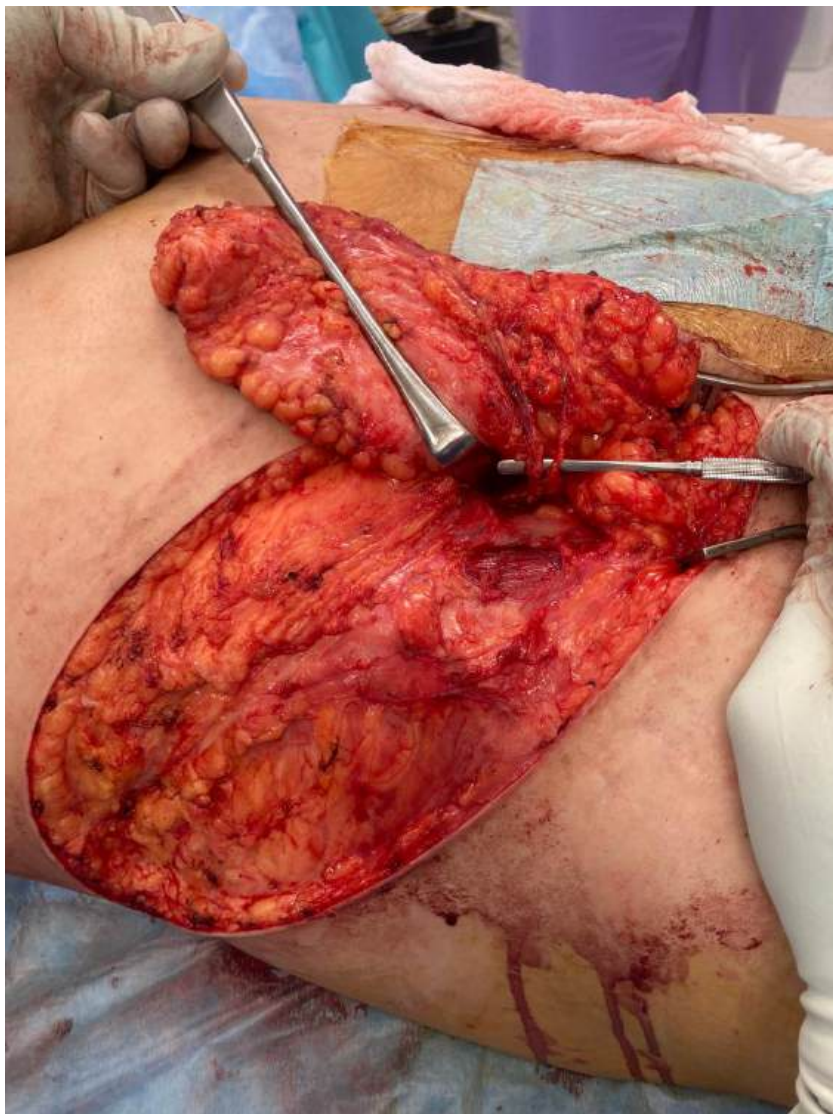
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Rehabilitation one and half month after surgery



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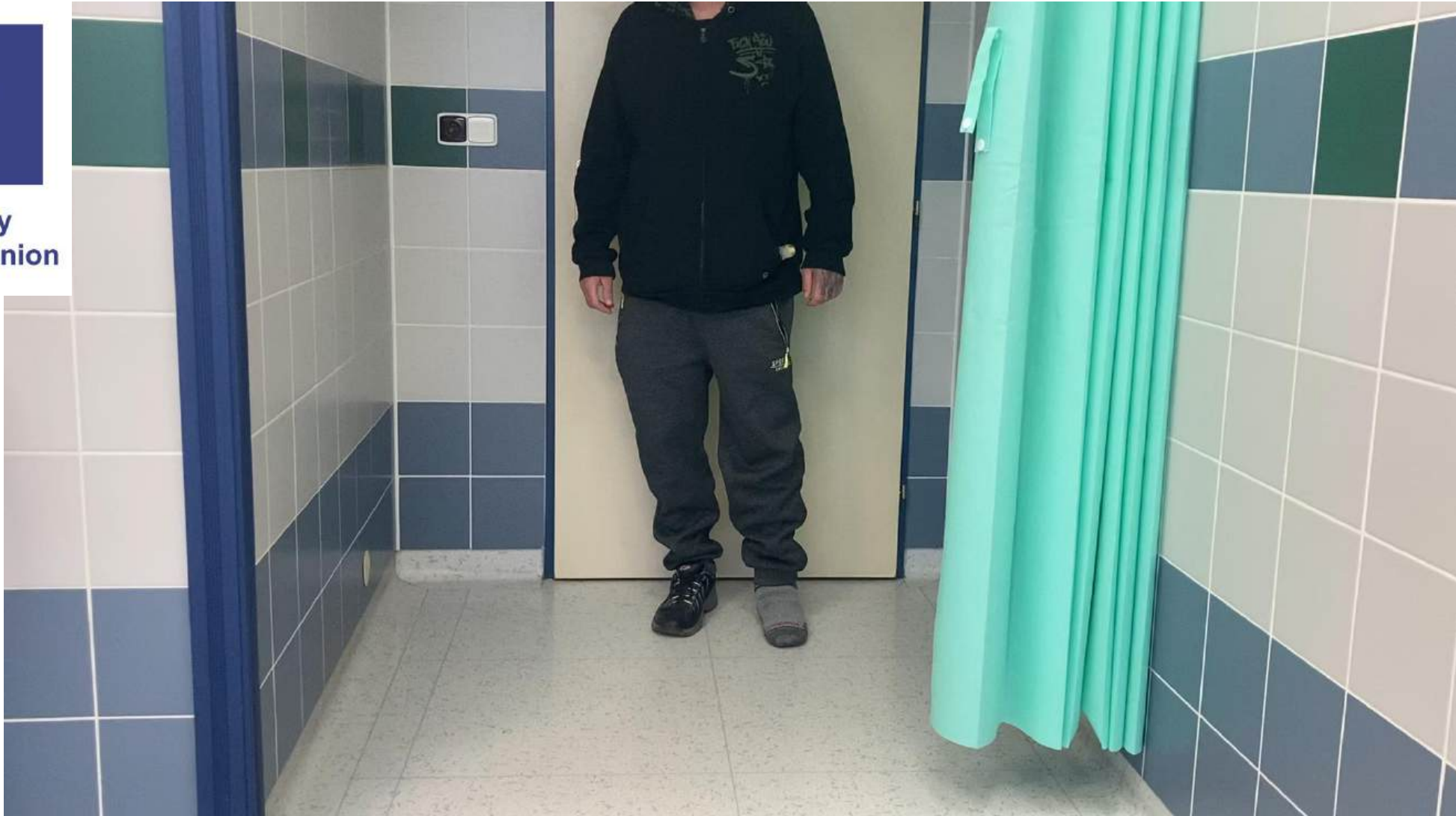
Jen díky němu ji mám.

Case report: double SCIP flap reconstruction of lower extremity defect

4th month after surgery



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Thank you for your attention