DIAGNOSIS AND TREATMENT OF A SYMPTOMATIC CEREBROSPINAL FLUID - CUTANEOUS FISTULA FOLLOWING TUNNELLED SPINAL CATHETER REMOVAL: A CASE REPORT

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Background

Cerebrospinal fluid (CSF)-cutaneous fistulas are a rare complication of neuraxial anaesthesia and analgesia techniques.

Our patient

- A 49-years-old female patient
- Diagnosed with anal carcinoma (T3N2M0)
- Received a tunnelled spinal catheter for administration of local anaesthetic for chronic pain treatment
- Three days after removal of the catheter she presented to our clinic with severe postural headache

Physical examination

Clear fluid leak from the exit site of the spinal catheter

Laboratory

Fluid was positive for beta-2-transferrin

MRI-scan of patient's lumbar region

Approximately 20 cm long CSF-cutaneous fistula (Fig. 1, Fig. 2)

Treatment

A deep cutaneous stitch close to the exit site of the fistula was placed, but this failed to stop the CSF leak. As conservative measures did not improve the patient's symptoms, an epidural blood patch was performed two weeks later. The postural headache diminished and disappeared two months afterwards.

Discussion

CSF-cutaneous fistulas need to be diagnosed as early as possible to avoid further complications and patient discomfort. In the presented case, treatment of this CSF-cutaneous fistula was challenging due to its extensive trajectory and long-term use of spinal catheter.

Fig. 1. Lumbar region MRI, cross-sectional view: right paramedian fluid collection

Fig. 2. Maximum intensity projection reconstruction of the CSF fistula: sagittal view