Complex abdominal wall reconstruction for an isolated parietal recurrence of ovarian cancer

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Abdominal wall involvement in gynecological malignancies can present a surgical challenge, particularly when primary fascia closure is not possible. To reduce the risk of post-operative hernia, there are several options available to restore abdominal wall integrity such as synthetic mesh, biological mesh, muscular flaps, and fasciocutaneous flaps. These options can be used depending on the specific circumstances and requirements of the patient.

In an active oncologic context, biological meshes and autologous flaps are often preferred over synthetic meshes for abdominal wall reconstruction. This is because biological meshes and autologous flaps carry a lower risk of mesh infection, exposure, and colonization by tumor cells. Additionally, they can provide satisfactory long-term functional outcomes. Therefore, when planning abdominal wall reconstruction, it is important to consider factors such as the extent of the resection, the risk of post-operative complications, and any planned adjuvant treatments. This pre-operative planning helps ensure...
the most appropriate choice for abdominal wall reconstruction in the given oncologic context.

We present a case of a patient who was treated for endometrioid ovarian cancer FIGO stage IIIC in 2017 and experienced an isolated abdominal wall relapse in December 2022. The patient underwent a surgical resection with en-bloc full-thickness parietal resection, and the abdominal wall reconstruction was planned using a biological mesh fixed to the rectus abdominis, covered by a pedicled anterolateral thigh fasciocutaneous flap. The patient was discharged on the 10th post-operative day. The anatomo-pathological analysis revealed a low-grade endometrioid adenocarcinoma with tumor-free surgical margins. On the 30th post-operative day the patient experienced an infected lymphocele of the thigh, which was successfully managed with percutaneous drainage and antibiotics. No mesh removal was required, and adjuvant chemotherapy was started within the sixth post-operative week. This case emphasizes the importance of tailored reconstruction in abdominal wall resections. It highlights the potential benefits of using a combined approach involving biological meshes and autologous flaps to achieve satisfactory functional, oncologic, and cosmetic outcomes while minimizing the post-operative risks and delays in adjuvant treatments.

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