

CLINICAL IMAGE

Fournier Gangrene in a patient receiving chemo–radiation for rectal cancer

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Abstract

We herein present a case of a 24-year-old patient with a cT4N+ rectal cancer who developed Fournier's gangrene (FG) 1 week after the completion of preoperative chemoradiotherapy. The patient was promptly referred to the surgical department where she was treated with antibiotics and repeated surgical debridement. FG is a rare and life-threatening situation that needs to be managed aggressively with no delay. The clinical image above is unique and characteristic of this clinical entity.

A 24-year-old woman was diagnosed with a locally advanced cT4N+M0 rectal adenocarcinoma, infiltrating the anus, sphincter, levator ani and posterior wall of vagina. The patient received preoperative external beam radiotherapy (IMRT technique) combined with oral capecitabine, at a dose of 1500 mg twice daily (825 mg/m² was administered concurrently with radiotherapy twice daily). Overall 50.5 Gy were administered in 25 fractions in 5 weeks. The Gross tumour volume including the primary tumour and depicted locoregional disease received 5040 cGy and the clinical target volume (the GTV plus a margin for sub-clinical disease spread) 4500 cGy. No major toxicity was noted during treatment.

One week after the completion of radiochemotherapy, the patient presented with severe perineal pain, fever, weakness, disorientation and a deteriorated clinical status.

Clinical examination revealed a black soft tissue extending from the right buttock to the adjacent perineal and anal skin, raising the possibility of the diagnosis of Fournier's Gangrene [FG], (Fig. 1). The patient was referred immediately to the surgical department where she underwent repeated extensive surgical debridement and received antibiotic treatment. The post-surgical recovery was unremarkable and the patient was discharged 2 months later. Recently one year later, the patient is alive and a local recurrence has been diagnosed in the left para-rectal/anal region. The patient is currently receiving re-irradiation with volumetric modulated arc therapy technique. At all instances, her disease was considered inoperable.

FG, in colorectal cancer patients receiving radiotherapy is an extremely rare but life-threatening complication that has been

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Figure 1: A black oedematous soft tissue extending from the right buttock to the adjacent perineal - anal skin is depicted.

described in the literature only twice [1, 2]. The mortality of FG is extremely high thus early diagnosis and aggressive management are crucial for patient's outcome [3]. A study with the largest patient series in the literature, conducted by Yilmazlar et al. [4], showed that FG is associated with a significant risk of mortality, that reaches 20,8%, if not treated with aggressive surgical procedures and antibiotics. This case was interesting since FG occurred within the irradiated area. Prompt clinical diagnosis and surgical management were crucial for patient's favourable outcome. The clinical picture presented above is unique and will help fellow clinicians in the diagnosis of this severe condition.

CONFLICT OF INTEREST STATEMENT

None declared.

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ETHICAL APPROVAL

Institutional Ethical Approval was given from B.O.C Oncology Center for publication.

CONSENT

The patient has given written consent for publication of the case.

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