How long should we follow patients managed for muscle-invasive bladder cancer? Lesson learned from a recent clinical practice

Aldo Franco De Rose¹, Francesco Vecco^{1, 2}, Francesca Ambrosini^{1, 2}, Rafaela Malinaric^{1, 2}, Guglielmo Mantica¹, Carlo Terrone^{1, 2}

¹ IRCCS Ospedale Policlinico San Martino, Genova, Italy; ² Università di Genova, (DISC), Genova, Italy.

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To the Editor,

The exact time to stop bladder cancer patient's follow-up is not well known and there is not a clear recommendation on if and when stop to follow a patient managed for *muscle invasive bladder cancer* (MIBC). Major urological guidelines (1, 2) do not provide a precise indication on the timing of follow-up, and there is currently no real consensus on optimal time schedule. However, MIBC is a disease with a high relapse rate of over 50% of patients at 5 years (considering local, distant and urothelial relapses), and very late recurrences have been detected in several patients after 5-years-tumor free periods (3, 4).

Furthermore, patients undergoing radical cystectomy require oncological but also functional follow-up, considering that complications related to urinary diversion are detected in 45% of patients during the first five years, reaching 54% after 15 years of follow-up (5).

Recently, we detected a very late urethral recurrence in a patient who underwent cystoprostatectomy and Bricker's ileal conduit urinary diversion in 2002 for MIBC (pT2 G3 N0). The patient, a 73 y/o diabetic man, strong tobacco consumer, had abandoned the follow-up 10 years ago, after as many years of surveillance in which he was free from disease. In 2021 the patient had urethral bleeding and prepuce edema. The urethroscopy found a white, solid mass in the proximal urethra, that the biopsy confirmed to be a urothelial carcinoma. Abdominal-penile MRI found a neoplasia likely originated from the urethra and from the corpus spongiosum, invading both corpora cavernosa, and bilateral inguinal lymphade-nomegaly. After six months of chemotherapy the patient underwent penectomy and lymphadenectomy. The definitive histological diagnosis was urothelial papillary carcinoma, with areas of squamous differentiation (pT3 G3 pN1).

The aim of this letter is not to present in detail the case of this unlucky patient, and therefore many info are voluntarily omitted, but to put the light on the possible need of a life-long follow-up for patients with MIBC who underwent radical cystectomy.

As previously stated, there is currently no clear recommendation on the timing of follow-up required in MIBC patients undergoing radical cystectomy. Recently a risk-adapted schedule (6) has been proposed, based on the interaction between recurrence risk and competing health factors that could lead to individualized follow-up recommendations and may increase recurrence detection. However, this model has not yet been validated and has several limitations such as not considering histological variants (7), which are increasing and that might be responsible of greater rate of recurrences.

To offer a patient-targeted follow-up, could become essential the use of biomarkers (8-10) currently available or in the experimental phase, capable of identifying the risk of recurrence and prognosis of different patients. This could lead to specific surveillance schedules, tailoring the patient's characteristics and recurrence risk (TNM, rare variants, urethral preservation, etc...). In this light, It is also essential to help the patient to stop smoking (11), in order to possibly reduce the risk of relapses, a factor that is often not investigated or stressed by the urologists.

Ultimately, in our opinion, the patient undergoing cystectomy is a patient who should be followed for life by the urologist, both from an oncological, functional and psychological point of view (12, 13).

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Correspondence

Aldo Franco De Rose, MD aldofrancoderose@gmail.com Francesco Vecco, MD (Corresponding Author) francesco.vecco@gmail.com IRCCS Ospedale Policlinico San Martino, Genova

Francesca Ambrosini, MD f.ambrosini1@gmail.com

Rafaela Malinaric, MD rafaela.malinaric@gmail.com

Guglielmo Mantica, MD guglielmo.mantica@gmail.com

Carlo Terrone, MD carlo.terrone@med.uniupo.it