Anal and rectal locally advanced basal cell carcinoma treated with sonidegib

Dear Editor,

Locally advanced basal cell carcinoma is defined as a tumor for which surgical and radiation treatment is not feasible. Sonidegib is an orally dosed smoothened (SMO) antagonist and it is approved for the treatment of adult patients with locally advanced or multiple basal cell carcinomas (laBCCs), not candidates for surgery or radiotherapy.[1]

Herein, we report the case of a 90-year-old patient who reported rectal bleeding for about 4 months. Suspecting a colorectal carcinoma, the patient underwent a colonoscopy with biopsies showing the presence of basal cell carcinoma foci in the rectum.

Pre-treatment staging with contrast-enhanced magnetic resonance imaging (MRI) (1,5 Tesla scanner), showed the presence of solid tissue with conspicuous enhancement after administration of contrast media at the level of the mucosa of the anal canal with an almost circumferential development and with extension up to the anorectal junction.

Radical surgery was proposed to the patient who, however, refused invasive treatments; therefore, the pros and cons of radiotherapy treatment were shown, which could have cause damage to the anal sphincter with consequent incontinence. The patient refused this treatment option and for this reason, he was referred to our Skin Cancer Unit in Trieste; at the clinical examination, further basal cell carcinomas were observed in the abdominal and retroauricular area, in addition to the severe anal involvement. Therefore, considering the patient's age and his refusal to invasive treatments, sonidegib 200 mg daily was started.

After 2 months of treatment, a good clinical response was observed, although with the appearance of nocturnal cramps and creatine kinase (CK) elevation with a maximum value of 311.

As expected, treatment was interrupted until CK was regularized. After 3 weeks, treatment with sonidegib was restarted at a dosage of 200 mg every other day. CK values did not increase and the treatment

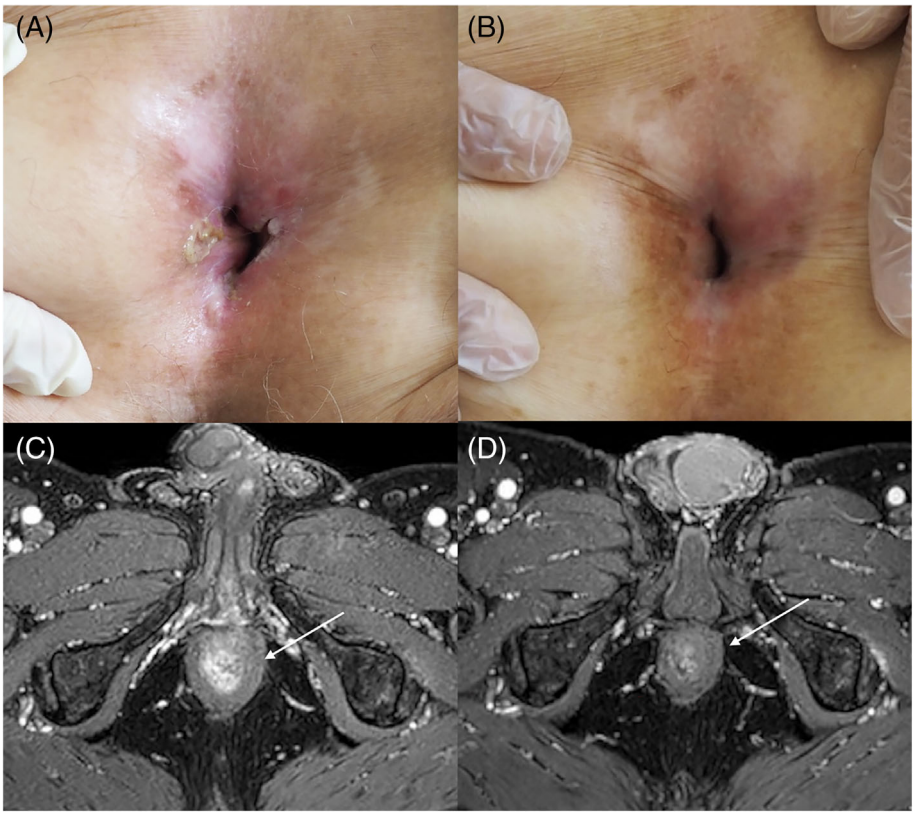

FIGURE 1 Clinical appearance of locally advanced anal basal cell carcinoma at baseline (A) and after 4 months of treatment, with a complete clinical response (B). Magnetic resonance imaging (MRI) pre-treatment, T1-weighted axial image after gadolinium contrast at the level of anorectal junction (arrowhead demonstrates the levator ani muscle), shows the presence of solid tissue with conspicuous enhancement (white arrow) with an almost circumferential development at the level of the anorectal mucosa (C). MRI post-treatment, T1-weighted axial image after gadolinium contrast at the same level (arrowhead demonstrates the levator ani muscle), shows the evident reduction of the solid tissue at the level of the anorectal mucosa (white arrow) in a sub-total response (D)

was better tolerated with rare episodes of nocturnal cramping. The patient is still under alternate-day dosing therapy.

After 5 months of therapy, the MRI showed a complete response (CR), without recurrence or satellitosis to the anal canal. In fact, post-treatment restaging with contrast-enhanced MRI, demonstrated the efficacy of the therapy with evident solid tissue reduction at the level of anal canal and anorectal junction (Figure 1). Furthermore, we performed a perianal skin biopsy, which histologically confirm the absence of tumor cells.

In addition, it should be noted that blood glucose values during treatment did not change, confirming that even in patients with diabetes or glucose intolerance the drug has a good safety profile.

To the best of our knowledge, this is the first case of a rectal and anal BCC treated with sonidegib with a CR. The only side effect observed during the treatment was a rise in CK with the appearance of cramps; however, as required by the data sheet of the drug, it was possible to switch to every other day dosage of 200 mg,[2] which resulted in a clinical benefit (absence and reduction of cramping episodes) and a lowering of CK values in the normal range.

CONFLICT OF INTEREST

The authors declare no conflict of interest.

AUTHOR CONTRIBUTIONS

All authors have made substantial contributions to the work reported in the manuscript. Iris Zalaudek, Nicola di Meo, Claudio Conforti and Ludovica Toffoli conceived of the presented case report. Claudio Conforti, Ludovica Toffoli and Ferruccio Degrassi wrote the manuscript. Iris Zalaudek, Nicola di Meo, Claudio Conforti and Ludovica Toffoli contributed to the final version of the manuscript.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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