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Bilateral vertebral collections in a patient with "end- stage" osteoradionecrosis after radiotherapy for orop- haryngeal cancer

Sir,

Adjuvant or primary radiotherapy may form part of the management of head and neck cancer. The benefits have been well documented, but there is no doubt that craniofacial osteoradionecrosis is a late complication of this type of treatment, and can be fatal.¹

We have previously reported the addition of "end-stage disease" in the classification of osteoradionecrosis, and on the incidence of a series of complications that are currently impossible to manage.²

We present a patient who attended after acute falls and seizures, who had a history of long-standing osteoradionecro- sis of the mandible and skull base.

Imaging confirmed perivertebral collections around the C1/C2 articular facets, which extended anteriorly from the anterior skull base caudally to the C6 vertebral level. The collection also extended into the epidural space at the C1/C2 level (Figs. 1 and 2) and had progressed through the epidural space, leading to cerebritis and ventriculitis. We also noted concomitant meningeal enhancement that involved the pituitary infundibulum, brainstem, cervical cord, and lower cranial nerves.

As the proportion of human papillomavirus-related oropharyngeal cancer (that is being treated with radiotherapy or chemoradiotherapy) continues to increase, the "at risk" population is also increasing, which necessitates better understanding and management of the disease.

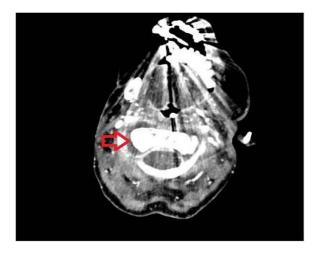


Fig. 1. Computed tomogram, axial view of C1, showing collection with epidural extension.

Fig. 2. Computed tomogram, sagittal view showing caudal extension of collection and osteoradionecrosis of the skull base.

The role of hyperbaric oxygen has been evaluated and the results have been published.³ Delanian et al have presented an alternative treatment,⁴ but this has not yet been evaluated with a well-designed clinical trial, and currently, we are lacking effective options for adequate treatment.

The potential advantages of radiotherapy cannot be dis- puted, but often during the consent process, only the immediate concerns are presented to patients. For informed consent, the severity of further, potential complications needs to be discussed in detail, which may have an effect on the uptake of adjuvant radiotherapy.

We have no conflicts of interest.

Ethics statement/confirmation of patient's permission

Ethics approval not applicable. The images used are not identifiable.

References

- 1. De Felice F, Musio D, Tombolini V. Osteoradionecrosis and inten- sity modulated radiation therapy: an overview. *Crit Rev Oncol Hematol* 2016;**107**:39–43.
- 2. Kanatas A, Doumas S. Classification of craniofacial osteoradionecro- sis: the addition of "end stage disease". Br J Oral Maxillofac Surg 2018;56:897–8.
- 3. Shaw RJ, Butterworth CJ, Silcocks P, et al. HOPON (Hyperbaric Oxygen for the Prevention of Osteoradionecrosis): a randomized controlled trial of hyperbaric oxygen to prevent osteoradionecrosis of the irradiated mandible after dentoalveolar surgery. *Int J Radiat Oncol Biol Phys* 2019;**104**:530–9.
- 4. Delanian S, Chatel C, Porcher R, et al. Complete restoration of refractory mandibular osteoradionecrosis by prolonged treatment with a pentoxifylline-tocopherol-clodronate combination (PENTOCLO): a phase II trial. *Int J Radiat Oncol Biol Phys* 2011;**80**:832–9.

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