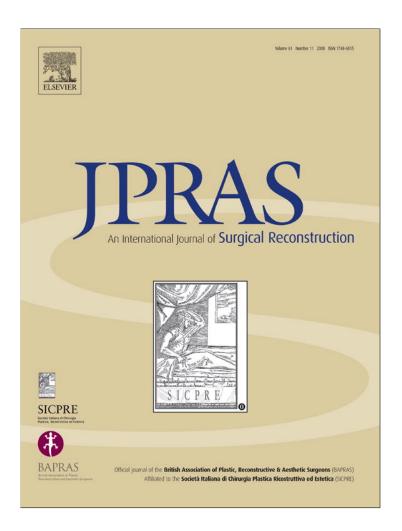
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CASE REPORT

Simultaneous surgical treatment of ulcer terebrans with intracranial propagation and acoustic neurinoma on the same side: a case report

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KEYWORDS

Acoustic neurinoma; Basal cell carcinoma; Brain tumour; Ulcer terebrans **Summary** This article presents a successful surgical treatment of the patient with aggressive basal cell carcinoma with intracranial propagation (ulcer terebrans) and simultaneous acoustic neurinoma on the same side.

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Case review

A 59-year-old Caucasian female patient, who is an agricultural worker and often exposed to the sun, noticed a small wound on her skin behind the left ear 10 years ago and that remained unchanged for several years. Then, it began spreading, and destroyed the surrounding soft tissues, including the ear. The patient hid this wound for many years under a headscarf and did not consult a doctor. Finally, due to diminished hearing, unpleasant ringing in her left ear and headache, she decided to seek treatment.

An extensive, destructive and bleeding lesion of the scalp on the patient's left suboccipital, superior nuchal and

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retroauricular regions, including a total destruction of the left ear, was observed (Figure 1a,b). Examination of the regional lymph nodes showed no invasion. Laboratory tests revealed chronic anaemia, and a histological examination of the biopsy specimens from the epicranial tumour showed invasive basal cell carcinoma. Audiologic test established a sensorineural hearing damage on the left side. The rest of the neurological examination was regular.

Magnetic resonance imaging revealed an extensive, destructive lesion of epicranial soft tissues of the left retroauricular and suboccipital regions, following full-thickness skull destruction and neoplastic invasion of the meninges with spreading into pontocerebellar angle. The additional finding was a well-demarcated enhancing mass in the same pontocerebellar angle, close to the brainstem, with displacement and compression of the fourth ventricle (Figure 1c).

The extensive scalp tumour was localised on the spot of the common neurosurgical approach to the tumour of

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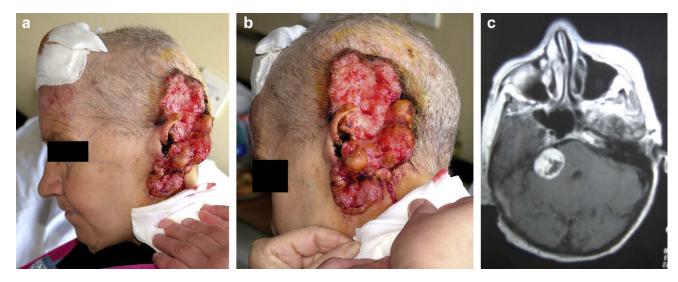


Figure 1 (a) and (b) An extensive, destructive and bleeding lesion of the scalp on the patient's left suboccipital, superior nuchal and retroauricular regions, including a total destruction of the left ear, was observed. (c) Magnetic resonance imaging revealed an extensive, destructive lesion of epicranial soft tissues of the left retroauricular and suboccipital regions, following full-thickness skull destruction and neoplastic invasion of the meninges with spreading into pontocerebellar angle.

pontocerebellar angle. The case demanded the cooperation between plastic surgeon and neurosurgeon. It was decided that both the tumours would be removed in one surgical intervention. As the first step, an extensive excision of the epicranial tumour was made, clinically at 1.5 cm on the surrounding healthy tissue. Part of the temporal, occipital and top third of the sternocleidomastoid region up to bone, the complete ear lobe, a part of the soft bone of the outer ear canal and part of parotid gland were removed (Figure 2a). At the spot of invasion and destruction of the occipital bone, a periosteum and the bone were removed up to the healthy tissue, with histological control. This was followed by resection of the invaded dura. The wall of the sigmoid sinus was not affected. Finally, a microsurgical total resection of the pontocerebellar tumour was performed (Figure 2b). Dura was plastificated by Lyodura® (Germany). Further surgical procedure included an extensive reconstruction of the soft tissue by local skin flaps and grafts. An aspiration drainage was placed and the patient responded well to the intervention. Postoperative period was without complications.

On the postoperative day 2, drainage was taken off, and the stitches were removed between 7th and 11th days. The patient was discharged on the postoperative day 12, with regular neurological status, vital flaps, accepted skin grafts and epithelised donor region (Figure 2c). Surgery was followed by adjunctive irradiation.

Histological investigation on intracranial spreading of the epicranial tumour confirmed the invasive basal cell carcinoma. On histological examination, the large pontocerebellar mass was found to be neurinoma/schwannoma (Antony A and B type, WHO grades I).

The importance of basal cell carcinomas is derived from its frequency, and the fact that in its advanced stage, in

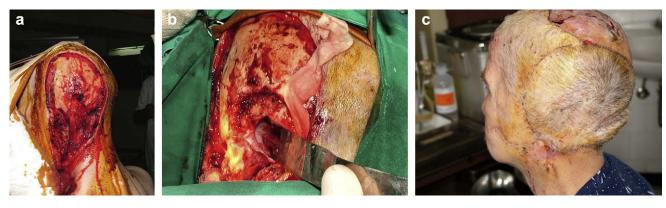


Figure 2 (a) After removing a part of the temporal, occipital and top third of the sternocleidomastoid region up to the bone, the complete ear lobe, a part of the soft bone of the outer ear canal and part of parotid gland. (b) After microsurgical total resection of the pontocerebellar tumour was performed. (c) The patient was discharged on the postoperative day 12, with regular neurological status, vital flaps, accepted skin grafts and epithelised donor region.

some regions, it leads to significant disfigurement and even death. Furthermore, protection from sun is important, and once the tumour appears, there must be a timely, radical surgical intervention. In neglected cases, where the tumour spreads into intracranial space, a multidisciplinary approach by the plastic surgeon, neurosurgeon and anaesthesiologist is needed in order to achieve the best possible results, as in the presented case.

There are only a few reported cases of association of basal cell carcinoma with intracranial propagation with other tumours in same patient. $^{1-3}$

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