a hearing aid due to pain and discharge from the left ear prompted the patient to attend the emergency department. Following the ear–nose–throat assessment, he was referred to skin cancer clinic. Initial biopsy confirmed a clinical suspicion of an infiltrative BCC affecting the left antihelix and conch bowl extending to the entrance of the external auditory meatus (EAM). Following a multidisciplinary approach between plastic surgery, dermatology and the head and neck team, three treatment options were discussed with the patient: Mohs micrographic surgery, standard excision, and radiotherapy. Preoperative imaging revealed the tumour abutting the parotid gland, but there was no involvement of the bony or cartilaginous aspects of the EAM. The patient pursued the Mohs procedure to preserve function and cosmesis of the ear. After two stages margins remained positive. The decision was made to stop the procedure, given the evidence of extension to the EAM. Two days later the patient underwent partial pinnectomy, which had evidence of a BCC extending to all margins with infiltration into the parotid gland and cartilaginous ear canal. Focal perineural invasion was present. Subsequently, this case was discussed with the head and neck team, with a multidisciplinary decision recommending a definitive resection. The patient underwent superficial left parotidectomy and complete pinnectomy including the cartilaginous external ear canal and tympanic membrane, followed by reconstruction with an anterolateral-thigh free flap. The patient received a prosthetic left ear and is currently awaiting an assessment for a bone-anchored hearing aid. Histologically, aggressive BCC was detected in clinically unremarkable areas of the pinna. It is likely that the multiple embryonic fusion planes within the EAM account for less predictable tumour spread. This case highlights the complexity of Mohs surgery on the ear and the need for a collaborative approach in management of those areas to provide the best quality of care for our patients.