

CASE REPORT

A case of ear canal black pigment foreign body mimicking a melanoma

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SUMMARY

Melanoma of the ear canal is extremely rare; due to its hidden area, most would present late in their history. We present the first case reported, of a black pigment foreign body mimicking a melanoma in the external auditory canal. A 14 year old Chinese male presented with right sided otalgia and itch. Otosopic examination revealed an irregular black naevus in the right auditory canal. An intra-operative excision showed a black pigment foreign body giant cell reaction. Clinicians should be aware of the possibility of a foreign body granuloma of the ear canal that might mimic a melanoma.

KEY WORDS:

Ear Canal Pigment, melanoma, foreign body

INTRODUCTION

Melanoma in the external auditory canal is a very rare entity. Due to its hidden location, melanoma within the ear canal itself is usually diagnosed late, and hence, in its advanced stage. However, clinicians need to be aware of other aetiologies of pigmented lesions in the ear canal. We present, the first reported case in the literature, of a young male with a black pigmented giant cell foreign body reaction, mimicking an external auditory canal melanoma.

CASE REPORT

A 14 year old Chinese male presented with the complaint of a right sided ear ache and itch. There was no otorrhoea or hearing loss. There was no giddiness, nausea nor history of injury or trauma. Clinical otoscopic examination revealed a normal tympanic membrane, and a dark pigmented lesion with an irregular edge on the posterior wall of the ear canal (Figure 1). The oro-nasal examination with the flexible naso-endoscope was essentially normal. There were no laryngeal lesions or cervical lymph nodes palpable.

The clinical impression was that of a Melanoma of the External Auditory Canal.

The patient underwent a trans-canal wide excision of the pigmented lesion, with a frozen section, under general anaesthesia. Intra-operatively, a wide excision margin was planned for, with a post-auricular full thickness skin graft harvested in order to cover the defect. As the lesion appeared to be invading the underlying bone (Figure 2), the ear canal skin with the lesion was completely removed with the underlying bone drilled down to remove all the visible lesion within the bone. The intra-operative histo-pathological frozen section showed black pigment particles with foreign body giant cell reaction around it, with no evidence of melanoma. The full thickness skin graft was placed onto the defect with the ear canal packed with absorbable gel foam.



Fig. 1: Otoscopic of the ear, showing irregular pigmented lesion.

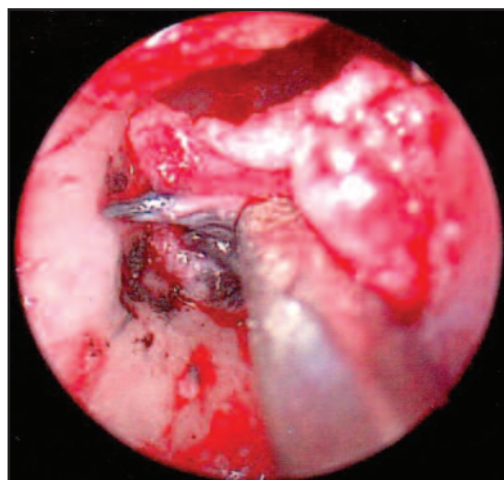


Fig. 2: Intra-operative endoscopic view, showing the pigmented lesion appearing to invade bone.

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On direct questioning postoperatively the possibility of a foreign body introduction into the ear canal was made. It was only then that the patient had recalled that as a 7 year old child his school mate had bullied him by inserting a pencil lead tip into his ear canal which had bled for half a day before it stopped. This was the likely explanation for the black pigment giant cell foreign body reaction.

The patient was reviewed 3 months following surgery, with good recovery and a well epithelised ear canal.

DISCUSSION

A nevus is a benign melanocytic pigmentation, and is the most common type of localized skin pigmentation.¹ It may occur anywhere on the skin, but its occurrence in the external auditory canal (EAC) is very rare. A melanocytic nevus is benign growth and can usually be left alone, a dysplastic nevus, however, should be excised to exclude a malignant melanoma. Clinically, it is often difficult to differentiate a dysplastic nevus from a malignant melanoma; they both have asymmetry, border irregularity, color variability and usually have a diameter greater than 6 mm when discovered. When a malignant melanoma cannot be ruled out despite careful clinical examination and/or when there are changes in a dysplastic nevus or findings for suspicion of a melanoma, an excisional biopsy would be prudent. Correct diagnosis cannot be made until excision and pathological examination are done.

Although rare, malignant melanoma of the external ear canal is especially dangerous, because detection is delayed due to its hidden location. Melanoma thicker than 4 mm has a very poor prognosis, and ear canal melanomas are typically thicker than that. Black wax is not typical of ceruminous gland secretions, therefore, the presence of material resembling black wax should be viewed as an ominous sign.²

In our case, as the patient had complained of an ear itch and an irregular-edged pigmented lesion was noted in the external ear canal, an excisional biopsy was imperative. Intra-operatively, the lesion appeared to "invade" the underlying bone, it was fortunate that the intra-operative frozen section had showed no evidence of a malignant melanoma; however, thorough drilling of the bone down to clean non-pigmented bony area was still performed.

CONCLUSION

This case would alert physicians to the possibility of an implanted pigmented lesion mimicking a melanoma within the ear canal.

EAC – External auditory canal

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