

Discharge from the Right Ear

A 32-year-old female attends the clinic complaining of intermittent discharge from the right ear. Her hearing is reduced in the right ear.

On examination, she has a perforation of her right tympanic membrane. The left ear is normal.

Age	32 years
Gender	Female
BP	115/70
HR	70
RR	18
T	36.6 C
HIV status	-ve

Perforated Tympanic Membrane



Normal Tympanic membrane



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Questions

1. What is the diagnosis?
2. What tests would be helpful?
3. Is the perforation likely to heal spontaneously?
4. What medical treatment might be helpful?
5. Is referral to a hospital with an ENT department indicated?

Discussion

1. *What is the diagnosis?*

The patient is suffering from chronic otitis media. There is a large perforation of the main part of the tympanic membrane (the pars tensa). The incus and stapes can be seen through the perforation.

2. *What tests would be helpful?*

It would be useful to assess the patient's hearing. This can be done using a voice test. The examiner stands an arm's length behind the patient and whispers a series of numbers and then asks the patient to repeat them. If they cannot, the test is repeated with using a normal voice, a loud voice and then shouting. The results may be classified as follows.

- Not able to hear whispered voice – slight hearing loss
- Not able to hear conversational voice – moderate hearing loss
- Not able to hear loud voice – severe hearing loss
- Not able to hear shouted voice – profound hearing loss

This test assesses the hearing in the **BETTER** hearing ear, so in this patient it would probably be normal. If the whispered voice cannot be heard, it would indicate that both the normal and abnormal ears have a degree of hearing loss

3. *Is the perforation likely to heal spontaneously?*

A large perforation in an adult almost never closes spontaneously. Smaller perforations sometimes close in children but seldom in adults.

4. *What medical treatment might be helpful?*

If there is active discharge, it can be treated with antibiotic eardrops. If the perforation is dry, no medical treatment will help.

Advise the patient to avoid getting water in their affected ear where possible. Patients with eardrum perforations often have pain in the affected ear when they go swimming and/or get water in their ears. This is often followed by discharge from the ear. You may also advise the patient to avoid poking at the ear (with fingers, cloth etc.).

5. Is referral to a hospital with an ENT department indicated?

If the patient has frequent episodes of ear discharge and they would like to have surgery, they could be referred to an ENT department. If their symptoms are mild and they don't want surgery, there is no need to make a referral.

However, if they have a retraction pocket containing keratin debris (cholesteatoma, see photograph below), rather than a perforation, they should be referred for surgery to prevent complications, such as brain abscess, meningitis or facial palsy.



If there is more than one perforation of the same tympanic membrane, the possibility of tuberculosis should be considered.

Key Points

- Perforations of the tympanic membrane are not always associated with significant symptoms.
- They seldom heal spontaneously.
- If the patient has significant symptoms, the perforations can be closed by surgery.
- If there are unusual features, such as a mass of keratin debris or multiple perforations, the patient should be referred to hospital.

For more information and advice, you can contact a member of our ENT team via the App.