

# Unusual Temporary Treatment for Mastoid Fistula

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## ABSTRACT

Postauricular mastoid fistula is a rare complication of chronic suppurative otitis media. It could also occur after ear surgery as a complication and at times as a complication of congenital cholesteatoma. Usual treatment suggested in literature is surgery by closing the defect by using temporalis muscle rotation flap. This article is an out of the box thinking to temporarily treat a patient having mastoid fistula by using a prosthesis made in the dental department using acrylic in order to snugly fit in the postauricular defect area. Such a prosthesis could be made use of when a patient experiences giddiness if and when water enters the fistula tract while bathing, or if the patient wants to postpone the surgery due to some reason.

**Keywords:** Postauricular mastoid fistula, complication, acrylic prosthesis

Postauricular cutaneous mastoid fistula is a rare condition, as rare as only about 6 cases were reported in literature.<sup>1</sup> Mastoid fistula is a rare complication of chronic suppurative otitis media. This complication could be secondary to ear surgery, or a complication of congenital cholesteatoma.<sup>2</sup> Usual treatment in all referred literature is surgery using:

- Temporalis muscle rotational flap for closure of the defect.<sup>1</sup>
- Fascio-cutaneo-periosteal advancement flap with Burow's triangles.<sup>2</sup>

However, simple closure is often unsuccessful because of the necrotic skin edges.

This article is written as an out of the box thinking in the treatment of a postauricular mastoid fistula, which presented to us a case of complication of chronic suppurative otitis media.

## CASE REPORT

A 65-year-old lady presented to us in the ENT OPD with a complication of chronic suppurative otitis media in the form of a postauricular mastoid fistula. She had uncontrolled diabetes and experienced giddiness while having bath as water was stimulating her labyrinth. Because of her comorbid condition and her debilitating giddiness, we tried helping her to buy time till she became fit for her surgery (which is the ideal treatment for a condition like this) by making a prosthesis that snugly fits in the fistula area and thus could help her overcome her giddiness, while having bath and preventing water entering the labyrinth.

The dentists initially approximated the depth of the sinus by measuring it using a match stick. Semi hot impression compound cake was molded over the match stick, which was inserted into the sinus. The impression was taken out and put into the bowl-containing wet dental stone (gypsum). Impression compound was removed after setting of dental stone by heating on to that impression cavity. Acrylic polymer and monomer were mixed and poured on a thin plate of acrylic over which water was poured and let to set.

After setting, the acrylic was taken out from the bowl by splitting of the set dental stone and checked for trying on the patient's sinus cavity. Figure 1 a and b show the prosthesis mold and Figure 1c shows the prosthesis *in situ*.

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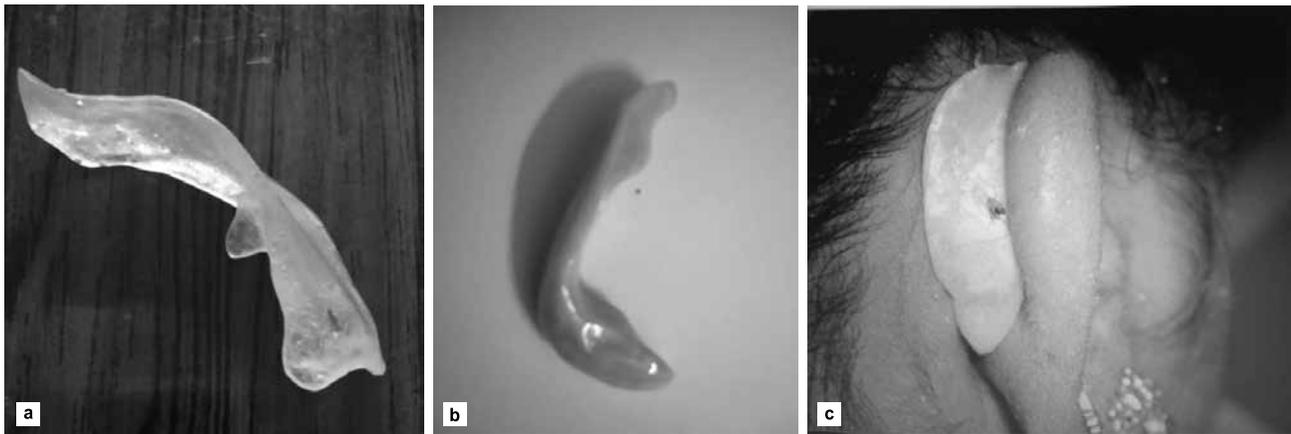


Figure 1 a and b. Prosthesis mold and c. Prosthesis *in situ*.

## DISCUSSION

We present here an unusual and temporary treatment of mastoid fistula. What makes this case a special one is that it has never been published in literature, and moreover it could be thought of as an ideal treatment for the patient who wants to buy time for surgery owing to the patient's comorbid conditions. At the same time, it can help the patient get rid of the debilitating giddiness, which is a consequence of the complication of chronic suppurative otitis media. However, surgery to close the fistula is the mainstay treatment of such a case.

## CONCLUSION

We can keep this as a treatment option, though surgery is the main treatment. Such a treatment

could be given a thought for patients who have comorbid conditions making them unfit for surgery and have other associated symptoms with regards to the disease condition per say, giving a choice to the patient to buy time till the patient could be made fit for surgery.

## REFERENCES

1. Choo JC, Shaw CL, Chong Y C S. Postauricular cutaneous mastoid fistula. *J Laryngol Otol*. 2004;118(11): 893-4.
2. Olusesi AD, Opaluwah E. Postauricular advancement fascio-cutaneo-periosteal flap for closure of mastoid cutaneous fistula. *Otolaryngol Pol*. 2014;68(5): 276-80.

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### Zika Transmission Low, But WHO Warns Travelers to be Vigilant

Pregnant women and couples intending to have a baby after traveling to places where Zika virus has been found should "consider the risks and possible consequences" of infection, the WHO said.

In a generally positive update on the spread of the mosquito-borne virus, which was linked to an unprecedented rise in the number of children born with unusually small heads in Brazil, the UN health agency said that Zika "persists", but global transmission has been low since 2018.

In addition to its advice to pregnant women or those wanting to become pregnant after traveling to destinations where Zika has been identified, WHO says that male travelers should take precautions up to 3 months after they have traveled to potential areas of transmission... (UN)

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In a recent clinical trial of higher risk patients undergoing cardiopulmonary bypass surgery, a restrictive approach to blood cell transfusions resulted in fewer transfusions without putting patients at increased risk of acute kidney injury. The results were consistent in patients with and without chronic kidney disease before surgery. The study is published online June 20, 2019 in the *Journal of the American Society of Nephrology*.