

# Benotol®



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### Composition

Paradichlorobenzene.....	2 %
Benzocaine.....	2.7 %
Chlorbutol.....	5%
Terpentine Oil.....	15%

### Indications

Benotol is used in the ear to help relieve the pain, swelling, and congestion of some ear infections. It will not cure the infection itself. An antibiotic will be needed to treat the infection.

### Description

Local anesthetic drugs act mainly by inhibiting sodium influx through sodium-specific ion channels in the neuronal cell membrane, in particular the so-called voltage-gated sodium channels. When the influx of sodium is interrupted, an action potential cannot arise and signal conduction is inhibited. The receptor site is thought to be located at the cytoplasmic (inner) portion of the sodium channel. Local anesthetic drugs bind more readily to "open" sodium channels, thus onset of neuronal blockade is faster in neurons that are rapidly firing. This is referred to as state dependent blockade.

Local anesthetics are weak bases and are usually formulated as the hydrochloride salt to render them water-soluble. At physiologic pH the protonated (ionised) and unprotonated (unionised) forms of the molecule exist in an equilibrium but only the unprotonated molecule diffuses readily across cell membranes. Once inside the cell, the lower pH results in the molecule being protonated, thus inhibiting its passage back out of the cell. This is referred to as "ion-trapping". In the protonated form, the molecule binds to the local anaesthetic binding site on the inside of the ion channel near the cytoplasmic end.



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Acidosis such as caused by wound infection partly reduces the action of local anesthetics. This is partly because most of the anaesthetic is ionised and therefore unable to cross the cell membrane

### CONTRAINDICATIONS

Known allergy or hypersensitivity to benzocaine.

Dosage: As per the physician's advice.

Presentations  
5ml/10ml Ear Drops

