Summary of Product Characteristics

1 NAME OF THE MEDICINAL PRODUCT

Gentisone HC 0.3% w/v & 1.0% w/v Ear Drops, Suspension

2 QUALITATIVE AND QUANTITATIVE COMPOSITION

Each bottle contains gentamicin sulfate equivalent to 0.3% w/v gentamicin base and 1.0% w/v hydrocortisone acetate.

Excipients with known effect:

Benzalkonium chloride 0.02% w/v

For the full list of excipients, see section 6.1.

3 PHARMACEUTICAL FORM

Ear drops, suspension.

White to pale yellow, odourless suspension.

4 CLINICAL PARTICULARS

4.1 Therapeutic indications

Gentisone HC Ear Drops are indicated in adults and children:

1. For the treatment of eczema and infection of the outer ear (otitis externa).
2. For prophylaxis against otitis externa following trauma.
3. For post-operative local use in surgery to infected mastoid cavities.

4.2 Posology and method of administration

Posology

Adults, the elderly and the paediatric population
The area should be cleaned and 2 - 4 drops instilled in the affected ear three to four times a day and at night. Alternatively, wicks medicated with Gentisone HC Ear Drops may be placed in the external ear or mastoid cavity.

Method of administration
Auricular use only.

4.3 Contraindications

Hypersensitivity to the active substances or to any of the excipientsl isted in section 6.1.

Known or suspected perforation of the ear drum.

Myasthenia gravis.

4.4 Special warnings and precautions for use

Long-term continuous topical therapy should be avoided. Prolonged use may lead to skin sensitisation and the emergence of resistant organisms. Cross sensitivity with other aminoglycoside antibiotics may occur.

In severe infections, topical use of Gentisone HC Ear Drops should be supplemented with appropriate systemic antibiotic treatment.

The condition of the ear drum must always be checked before this medicinal product is prescribed. The medicinal product mus t not be used if the integrity of the ear drum cannot be guaranteed.

Gentamicin may cause irreversible partial or total deafness when given systemically or when applied topically to open wounds or damaged skin. This effect is dose-related and is enhanced by renal and/or hepatic impairment and is more likely in the elderly.

Topical application of aminoglycoside antibiotics into the middle ear carries a theoretical risk of causing hearing loss due to ototoxicity.

The benefits of gentamicin therapy should be considered against the risk of infection itself causing hearing loss.

Serious adversere actions including neurotoxicity, ototoxicity and nephrotoxicity have occurred in patients receiving systemic gentamicin therapy. Although these effects have not been reported following topical otic use of gentamicin, caution is advised when used concomitantly with systemic aminoglycosides.

Visual disturbance
Visual disturbance maybe reported with systemic and topical corticosteroid use. If a patient presents with symptoms such as blurred vision or other visual disturbances, the patient should be considered for referral to an ophthalmologist for evaluation of possible causes which mayinclude cataract, glaucoma or rare diseases such as central serous chorioretinopathy (CSCR) which have been reported after use of systemic and topical corticosteroids.

Gentisone HC Ear Drops contain benzalkonium chloride, which is irritant and may cause skin reactions.

Paediatric population
In infants there is a theoretical risk that sufficient steroid may be absorbed to cause adrenal suppression.

4.5 Interaction with other medicinal products and other forms of interaction

None relevant to topical use.

4.6 Fertility, pregnancy and lactation

Pregnancy
Safety for use in pregnancy has not been established. Topical administration of any corticosteroid to pregnant animals can cause abnormalities of foetal development. Gentisone HC Ear Drops should only be used in pregnancy when considered essential by the physician, after careful assessment of the potential risks and benefits.

Breast-feeding
Safety for use in lactation has not been established. Gentisone HC Ear Drops should only be used in lactation when considered essential by the physician, after careful assessment of the potential risks and benefits.

4.7 Effects on ability to drive and use machines

Not relevant.

4.8 Undesirable effects

The undesirable effects listed below have been reported at the following frequency: Not known (cannot be estimated from available data)

System Organ Class	Frequency	Adverse Reactions
Immune system disorders	Not known	Hypersensitivity, allergic reaction
Nervous system disorders	Not known	Dizziness

Eye disorders	Not known	Vision, blurred (see also section 4.4)
Ear and labyrinth disorders	Not known	- Tinnitus - Local sensitivity - Ototoxicity - Vestibular disorder: - Hearing loss
Skin and subcutaneous tissue disorders	Not known	- Irritation - Burning sensation - Stinging - Itching (pruritus): - Dermatitis.
Renal and urinary disorders	Not known	- Nephrotoxicity* - Acute renal failure

*Gentamicin may cause nephro toxicity when given systemically. However, it is likely that systemic absorption following topical administration does not constitute a comparable risk.

In the event of irritation, sensitisation or super-infection, treatment with Gentisone HC Ear Drops should be discontinued and appropriate therapy instituted.

Reporting of suspected adverse reactions
Reporting suspected adverse reactions after authorisation of the medicinal product is important. It allows continued monitoring of the benefit/risk balance of the medicinal product. Health care professionals are asked to report any suspected adverse reactions via HPRA Pharmacovigilance, Earlsfort Terrace, IRL - Dublin 2; Tel: +353 1 6764971; Fax: +353 1 6762517. Website: www.hpra.ie; E-mail: medsafety@hpra.ie

4.9 Overdose

Not applicable.

5 PHARMACOLOGICAL PROPERTIES

5.1 Pharmacodynamic properties

Pharmacotherapeutic group: Antiinfectives
ATC code: S03AA

Mechanism of action
Gentamicin is mixture of antibiotic substances produced by the growth of micromonospora purpurea. It is a bactericidal antibiotic which acts by inhibiting protein synthesis. It has greater antibacterial activity than streptomycin, neomycin or kanamycin.
Gentamicin exerts a number of effects on cells of susceptible bacteria. It affects the integrity of the plasma membrane and the metabolism of RNA, but it's most important effect is inhibition of protein synthesis at the level of the 30s ribosomal subunit.

Corticosteroids, such as hydrocortisone acetate, are used in pharmacological doses for their anti-inflammatory and immuno-suppressant glucocorticoid properties which suppress the clinical manifestation of disease in a wide range of disorders.

5.2 Pharmacokinetic properties

Absorption
Topical application of gentamicin can result in some systemic absorption. Treatment of large areas can result in plasma concentrations of up to 1mg/ml.

Gentamicin is 70-85% bound to plasma albumin following administration.

Effective plasma concentration is 4 - 8mg/ml
The volume of distribution ($^{V}_{D}$) is 0.3 1/kg

Hydrocortisone acetate is not absorbed through the skin as rapidly as hydrocortisone and therefore has a prolonged action. Some is absorbed systemically, where greater than 90% is protein bound.

Elimination
> 90% Gentamicin is excreted unchanged in the urine by glomerular filtration.
$T_{½}$ = 2 - 3 hours in individuals with normal kidney function, but can be increased in cases of renal insufficiency.

The elimination rate constant is;
0.02 Hr^{-1} for anuric patients*
0.30 Hr^{-1} normal

*Therefore in those with anuria care must be exercised.

> 70% hydrocortisone acetate is metabolised by the liver. The metabolites are excreted in the urine.
Plasma $T_{½}$ = 1½ hours.

5.3 Preclinical safety data

See section 4.6.

6 PHARMACEUTICAL PARTICULARS

6.1 List of excipients

Benzalkonium chloride
Povidone (E1201)
Macrogol 4000
Sodium chloride
Borax (E285)
Disodium edetate
Purified water

6.2 Incompatibilities

Not applicable.

6.3 Shelf life

3 years. Discard contents 4 weeks after opening.

6.4 Special precautions for storage

Store below 25°C. Do not freeze or mix with other liquids.

6.5 Nature and contents of container

10ml opaque LDPE bottles with closures comprising polyethylene plug/droppers and screw-on HDPE tamper-evident caps.

6.6 Special precautions for disposal and other handling

Any unused medicinal product or waste material should be disposed of in accordance with local requirements.

7 MARKETING AUTHORISATION HOLDER

Amdipharm Limited
Temple Chambers
3 Burlington Road
Dublin 4
Ireland

8 MARKETING AUTHORISATION NUMBER

PA1142/014/001

9 DATE OF FIRST AUTHORISATION/RENEWAL OF THE AUTHORISATION

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Date of last renewal: 18 May 2010

10 DATE OF REVISION OF THE TEXT

May 2024