# The Journal of Laryngology and Otology

G. H. BATEMAN

ASSISTANT EDITOR LIONEL TAYLOR

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# The Journal of Laryngology and Otology

(Founded in 1887 by Morell Mackenzie and Norris Wolfenden)

EDITED BY

## G. H. BATEMAN

ASSISTANT EDITOR LIONEL TAYLOR

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#### i

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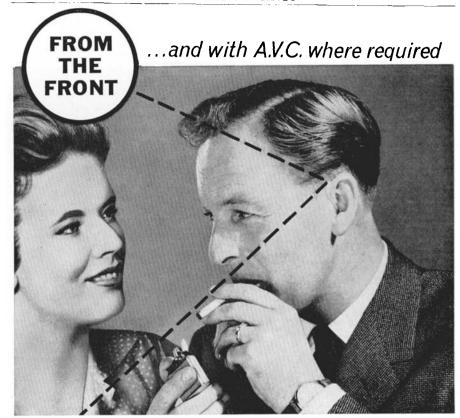
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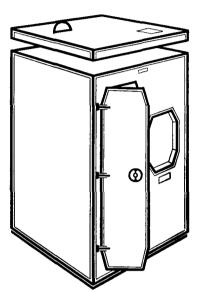
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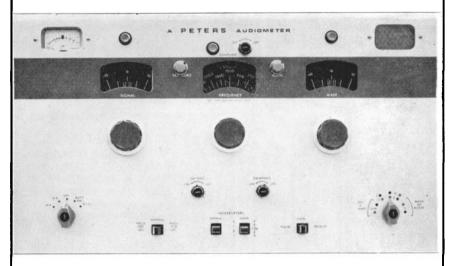
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# Ceporin cephaloridine

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#### **Bactericidal**

Ceporin rapidly kills susceptible organisms at or near the minimum inhibitory concentration, leaving little opportunity for resistance to develop.

#### Well tolerated

Ceporin has very low toxicity and can be given safely to the newborn.<sup>1</sup> In reduced dosage, Ceporin is safe to use when renal function is impaired<sup>2</sup> and is usually well tolerated by patients allergic to penicillin.<sup>3</sup>

#### Clinical success

"The claims of cephaloridine rest on its very broad range of bactericidal activity and upon its low toxicity, particularly in patients who have shown hypersensitization to penicillin." <sup>4</sup> Many published conclusions such as this have confirmed the value of Ceporin in the treatment of patients in whom penicillin has proved ineffective or dangerous. Ceporin's broad-spectrum activity is particularly useful when mixed infections are encountered—as, for example, in sinusitis.

### New 100 mg vials for babies

For greater convenience in the preparation and administration of small doses, Ceporin is now presented in vials containing 100 mg of cephaloridine. In the usual recommended dosage for infants, 100 mg will be used all at once without waste.

#### References

- Supplement to Postgrad. med. J. (1967) 43, 105, 112
- 2. Supplement to Postgrad. med. J. (1967) 43, 87, 92.
- 3. Amer. J. med. Sci. (1966) 251, 275.
- 4. Brit. J. Clin. Pract. (1967) 21, 335.

## For your detailed reading Ceporin cephaloridine

Ceporin is cephaloridine, a semi-synthetic, broadspectrum, bactericidal antibiotic derived from cephalosporin C, presented as a water-soluble crystalline powder for parenteral administration in solution. It is usually well tolerated by patients who are allergic to penicillin.

#### Antibacterial activity

Antibacterial activity
Ceporin is highly active against Staphylococcus aureus
including strains which are resistant to penicillin,
Streptococcus progenes, Streptococcus viridans,
Diplococcus progenes, Streptococcus viridans,
Diplococcus paecalis, (enterococcus),
Gram-negative organisms which are sensitive to Ceporin
include Proteus mirabilis (the commonest infecting
organism of the Proteus species), Escherichia coli,
Neisseria meningilidis, Neisseria gonorihoea, most strains
of Klebsiella pneumoniae, and many strains of
Haemophilus influenzae. Ceporin is also active against
Treponema and Leptospira spp. It has no activity
clinically against Pseudomonas aeruginosa (pyocyanea),
Mycobacterium tuberculosis, Brucella abortus, most
strains of Aerobacter aerogenes, pathogenic fungi,
protozoa or viruses.

strains of Aerobacter serogenes, pathogenic fungi, protozoa or viruses. Ceporin is highly bactericidal. Like the penicililins it acts principally against actively growing and dividing cells, of which usually more than 99% are killed in two to five hours, at concentrations only slightly higher than the minimum inhibitory concentration. Development of resistance is therefore uncommon. Ceporin is relatively insensitive to staphylococcal penicillinase,

#### Indications

Respiratory tract infections: follicular tonsillitis,

pharyngitis, sinusitis, acute and chronic bronchitis, infected bronchiectasis, bacterial pneumonia and bronchopneumonia, post-operative chest infections, empyema, lung abscess and complicated whooping cough.

Urinary tract infections: acute and chronic pyelonephritis,

cystitis, asymptomatic bacteriuria and bacterial prostatitis. Soft-tissue and skin infections: furunculitis, cellulitis, carbuncles, abscesses, erysipelas, infected gangrene, otitis media and mastoiditis, peritonitis and post-traumatic and post-surgical wound infections. Other infections: septicaemia, whether gram-positive or gram-negative. Endocarditis, both acute and subacute. Meningitis, especially pneumococcal. Gynaecological and obstetrical infections, including septic abortion, uterine infections, endometritis, amnionitis, pelvic abscess, pelvic cellulitis, breast abscess and prophylactically in Caesarean section and prolonged labour. Neo-natal infection, prophylaxis and treatment. Gonorrhoea and syphilis where penicillin is unsuitable due to resistant organisms or allergy. Bone and joint infections, including osteomyelitis and septic arthritis. Intensive care, artificial kidney and peritoneal dialysis units—prophylactically and therapeutically. Prophylactically in open-heart, vascular and genito-urinary surgery. Also in orthopaedic surgery where amputations are undertaken because of inadequate blood supply to limbs.

Dental treatment: patients receiving long-term penicillin prophylaxis against endocarditis require a different antibiotic whilst undergoing dental treatment and Ceporin is well suited for this purpose.

General dosage and administration Ceporin is not absorbed by mouth. It is usually given by intramuscular or deep subcutaneous injection, which is painless and well tolerated. It may also be given intravenously, intrathecally, intrapleurally or intraperitoneally.

Table 1 General guide to dosage (see also specific dosage recommendations section)

Indications	Adults	Infants and children
Gram-positive infections of a mild or moderate nature* and urinary tract infections	15 to 30 mg/kg/day e.g. 0-5 gram two or three times a day or	15 to 30 mg/kg/day (7 to 14 mg/lb/day) divided into two or three doses
*Acute, simple soft tissue infections	1 gram twice a day 1 gram once a day is adequate	
Gram-negative or mixed infections (except those of the urinary tract) and severe gram-positive infections	40 to 66 mg/kg/day e.g. 1 gram three times a day or 1.5 grams two or three times a day or 2 grams twice a day	40 to 60 mg/kg/day (18 to 27 mg/lb/day) divided into two or three doses
Infections of exceptional severity (e.g., bacterial endocarditis and septicaemia) and severe, chronic, purulent bronchitis	60 to 100 mg/kg/day e.g. 1.5 to 2 grams three times a day or 1 gram four times a day	60 to 100 mg/kg/day (27 to 45 mg/lb/day) divided into two to four doses
Neo-natal infections therapy		30 mg/kg/day divided into two doses
prophylaxis		30 mg/kg/day as one daily dose

General guide to dosage in presence of impaired renal function

Impaired renar function if impaired and the dosage of the drug not reduced, then abnormally high, and possibly toxic, levels of the drug may accumulate in the blood and tissues. The degree of renal function impairment should be determined (as, for example, by creatinine clearance,

serum creatinine and blood urea) and, if possible, blood levels of the antibiotic should be monitored. Table 2 is an approximate guide to continuation dosage, following a loading dose of 1 gram of Ceporin. Adjustment may be needed for individual patients according to the blood levels of drug achieved. (continued overles!)

#### Table 2

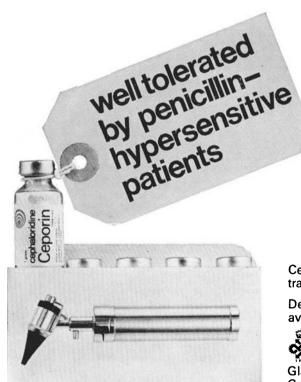
Blood urea mg/100 ml	Serum creatinine mg/100 ml	Creatinine clearance mg/min	Recommended maximum dosage of Ceporin grams daily
60 to 100	1 · 2 to 4	>10	2.0
100 to 200	4 to 6	5 to 10	1.0
>200	>6	<5	0.5

Side effects and toxicity
With a dosage of 6 grams or more daily, hyaline casts
have appeared temporarily in the urine of some patients,
occasionally accompanied by scanty other cellular
elements. There have also been rare reports of disturbance
of renal function associated with high blood levels of
Ceporin. It is important, therefore, when using high doses
of the drug (6 grams or more daily) or when renal
function is impaired, to avoid abnormally high blood
levels of Ceporin. Dosage should be adjusted carefully in
patients with severe renal impairment in accordance with
blood levels of the drug (see section on dosage patients with severe renal impairment in accordance with blood levels of the drug (see section on dosage recommendations for patients with impaired renal function). As with other antibiotics, Ceporin should be administered with caution to patients with a history of allergy, especially to drugs (including penicillin). Ceporin is usually tolerated well by patients allergic to penicillin, but cross-reaction with penicillin has been encountered rarely. Ceporin occasionally causes hypersensitivity reactions, mostly skin rashes. If this happens the drug should be stopped and not used again in that patient.

Very rarely an anaphylactic reaction has developed. In this Very rarely an anaphylactic reaction has developed. In this event the drug should be discontinued immediately and the patient treated at once with the usual agents (adrenaline, antihistamines and an intravenous corticosteroid). A few cases of reversible neutropenia have been reported and a temporary slight rise in serum glutamic-oxaloacetic transaminase has been noted. Reversible nystagmus and signs of cerebral irritation have occurred following intrathecal administration of 100 mg or more, but not when the maximum adult intrathecal dose does not exceed 50 mg. There has been no laboratory or clinical evidence of teratogenicity or embryopathic effects but, as with all drugs, Ceporin should be used with caution in the early months of pregnancy.

#### Presentation

Ceporin is issued in vials containing 250 mg, 500 mg and 1 gram of cephaloridine, packed singly and in boxes of five. Vials containing 100 mg of cephaloridine are packed in boxes of five only.



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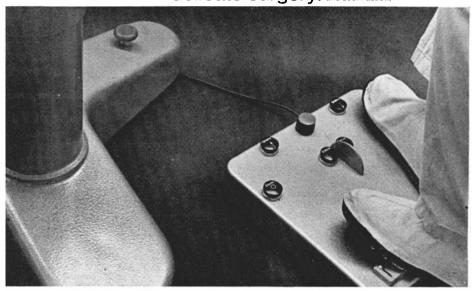
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1. Practitioner (1967), 198:85.
2. Practitioner (1965), 194:676.

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