

Septilin in Ear, Nose and Throat Infection

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INTRODUCTION

Septilin, which possesses antibacterial and anti-inflammatory properties is derived from indigenous plant principles. Thus Septilin (The Himalaya Drug Co.) is chemically distinct from all other clinically available antibiotics. Each tablet of Septilin contains:

Balsamodendron mukul	0.162 g
Maharasnadi quath	65 mg
Exts. Phyllanthus emblica	16 mg
Tinospora cordifolia	49 mg
Rubia cordifolia	32 mg
Moringa pterygosperma	16 mg
Pristimera indica	6 mg
Shankh bhasma	32 mg

The marked anti-inflammatory and anti-exudative property of Balsamodendron mukul has been demonstrated in experimental rats by the granuloma pouch method. (Gujral, M.L., 1962).

It has been claimed that Septilin is very effective in chronic, stubborn infections of the upper respiratory tract and that it also builds up resistance to infection in the mucosa.

The present clinical trial with Septilin was done in infective conditions of ear, nose and throat. The causative organisms were cultured and their sensitivity to commonly-used chemotherapeutic agents was tested. Particular care was taken to investigate the toxic effects, if any, associated with this drug.

MATERIAL AND METHODS

Three hundred and eleven patients (207 males and 104 females including 30 children) suffering from infections of ear, nose and throat were selected from the Out-patients and In-patients sections of the Ear, Nose and Throat, J.N. Medical College Hospital, A.M.U., Aligarh. Pregnant women were excluded.

A thorough E.N.T. examination including transillumination test and X-ray of the paranasal sinuses was carried out before and after therapy.

Total and Differential W.B.C. counts, urine examination, liver and kidney function tests, post-nasal and throat swab examination for culture and sensitivity tests were carried out before during and after Septilin therapy in every case. Surgical interventions such as antrum puncture and lavage were found necessary in thirty-five cases.

The cases were categorised as mild or severe grade infections. A leucocyte count up to 12,000 /cu. mm. with evidence of only slight toxæmia differentiated the mild from the severe grade of

infection. The dosage of Septilin employed depended on the severity of infection and age of the patient. The dosage schedule is given in Table I.

Route	Adult		Children	
	Mild	Severe	Mild	Severe
Oral	1 tab. t.i.d.	2 tabs. t.i.d.	1 tab. b.i.d.	1 tab. b.i.d.

(In chronic cases, though early relief is obtained, the therapy needs to be continued for about 22 to 25 days for an effective control).

The response to Septilin was evaluated as excellent, good, poor or none from the third to the fifth day in acute cases and from the fifteenth to the thirty-fifth day in chronic cases. The basis of the clinical improvement was judged from the degree of resolution of inflammation, relief from pain and tenderness and return of leucocyte count to normal and abatement of all symptoms in chronic cases. The cases were particularly observed for any manifestation of side-effects and toxicity during therapy and for three to four months thereafter, for any recurrence after clinical cure.

RESULTS

Before the initiation of Septilin therapy, the first step in every case was the isolation and identification of the pathogenic micro-organisms and testing their sensitivity to different chemotherapeutic agents. The organisms isolated before Septilin therapy and their response to different drugs is shown in Table II. In spite of the remarkable symptomatic relief, the *in vitro* results are surprising.

Organisms	Chemotherapeutic Agents					
	P.	Su.	Str.	Ery.	O.T.	S
Staphylococcus aureus	+	+	-	+	+	-
Staphylococcus albus	±	+	-	+	+	-
Streptococcus viridans	+	-	-	+	±	-
Streptococcus anhaemolyticus	±	-	-	+	+	-
Neisseria catarrhalis	+	+	+	+	+	-
Klebsiella	-	-	+	+	+	-

The clinical response to Septilin therapy in the wide range of E.N.T. infections treated in the present study is summarised in Table III.

Disease	Number of patients	Response				Average duration of therapy in days	Average duration of follow-up in weeks	Recurrence
		Excellent	Good	Poor	None			
1. Acute Coryza	50	40	10	-	-	5	8	None
2. Acute Sinusitis	40	15	20	3	2	10	16	6
3. Acute Follicular Tonsillitis	15	6	6	3	-	15	16	None
4. Acute Tonsillitis (5 with adenoiditis)	25	13	12	-	-	12	20	None
5. Acute Pharyngitis	10	5	3	1	1	8	12	None
6. Chronic Recurrent Tonsillitis (20 with adenoiditis)	70	55	15	-	-	22	24	4
7. Chronic Pharyngitis	30	10	10	4	6	16	12	2
8. Chronic Catarrhal Sinusitis	35	13	17	3	2	25	24	6
9. Acute Bronchitis	10	-	8	-	2	10	6	-
10. Acute Laryngitis	8	8	-	-	-	8	4	-
11. Acute Otitis media	12	2	10	-	-	6	2	-
12. Acute Suppurative Otitis media	6	-	-	-	6	10	-	-

DISCUSSION

The foregoing observations show that Septilin therapy was as effective in controlling acute infections as well as chronic infection of ear, nose and throat, except for a few cases of recurrence in the latter group (Table III). The average duration of therapy was also less in acute cases.

Conservative treatment included decongestant nasal drops and readily diffusible volatile solvents instituted in both the acute and chronic infections of the sinuses to improve the ventilation of the sinuses. In the latter group, antrum puncture and lavage was carried out wherever necessary.

Cases which experienced recurrence showed varying degree of improvement, although for a short period, when treated with Septilin again. It clearly shows that even with prolonged use, resistance to Septilin does not develop. Septilin therapy was also found to be effective in patients who have developed resistance to commonly-used antibiotics (see Table II). However, in chronic infective states, though early relief is obtained with Septilin, therapy should be continued for about twenty to twenty-five days for an effective control.

Allergic or hypersensitivity reactions were not noted in any of the 311 cases in this series treated with Septilin. In 6 cases which were allergic to penicillin, administration of Septilin was not followed by any hypersensitivity reactions. Stool culture on Sabraud's medium did not show any evidence of Monilial infection in any case. None of the patients showed any impairment of liver or kidney function, neurotoxicity or dermatological reaction. There was occasional dryness of the throat.

Acute otitis media cases responded well to Septilin therapy but Septilin proved ineffective in acute suppurative otitis media.

SUMMARY

Septilin therapy was found to be equally effective in acute and chronic infections of Ear, Nose and Throat, with minimal recurrence. It does not show any hypersensitivity reactions or toxicity and can be safely used over a long period without any hazard of developing any resistance.

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