INTRODUCTION
A controversy has been raging in the field of medicine whether operative procedures in chronic infections of ear, nose and throat can be avoided by conservative measures.

Over the years, many conservative measures have been tried. Long-term administration of antibiotics (mostly penicillin) as well as short intermittent courses with sub-clinical doses of drugs have been tried for weeks, at times for months. In our search of conservative treatment to check recurrent attacks of chronic infection of ear, nose and throat, we came across the drug Septilin (The Himalaya Drug Co.) which is claimed to have curative properties in chronic infection of ear, nose and throat. It was therefore decided to conduct a clinical trial of Septilin in cases of chronic infection of ear, nose and throat.

COMPOSITION
Septilin contains herbo-mineral principles with the following pharmacological actions attributed to them.

*Balsamodendron mukul (Guggul)*: has marked antiseptic properties; its therapeutic actions are like that of ACTH. It raises the general defence mechanism of the body and helps to overcome the infective process and inflammation.

*Tinospora cordifolia (Gulvel)*: is a diuretic and tonic; it stimulates the liver is antipyogenic.

*Rubia cordifolia (Manjishta)*: is well known for its antipyogenic properties.

*Phyllanthus emblica (Amla)*: is the richest source of ascorbic acid. The effects of vitamin C on the adrenal cortex in building up resistance to infections are well known.

*Moringa pterygosperma (Sonjna)*: contains a physiologically active, basic principle, Spirochin and an antibiotic substance, Pterygospermin. Spirochin is effective in combating gram-positive infections, specially *Staphylococcus* and *Streptococcus*. It promotes epithelialisation and also has an analgesic effect. Pterygospermin exhibits pronounced antibacterial activity against gram-positive and gram-negative organisms.

*Pristimera indica (Lokhandi)*: contains antibacterial principle, Pristimerin which is active against a large number of gram-positive cocci, particularly against *Streptococcus viridans*, the agents causing sore-throat, tonsillitis and *Streptococcus* arthritis and also against *Streptococcus Pyogenes*.

Shankh bhasma: is effective in building up general resistance of the body.

MATERIAL AND METHODS
One hundred and thirty cases of chronic infection of ear, nose and throat were screened with Septilin over a period of one year.

The patients were divided into three groups:

(1) Chronic sinusitis.
(2) Chronic suppurative otitis media.
(3) Chronic throat infection.

<table>
<thead>
<tr>
<th>Disease group</th>
<th>Male 6-12 years</th>
<th>Female 6-12 years</th>
<th>Male 13-34 years</th>
<th>Female 13-34 years</th>
<th>Male 35 years and above</th>
<th>Female 35 years and above</th>
<th>Total</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chronic sinusitis</td>
<td>—</td>
<td>—</td>
<td>11</td>
<td>17</td>
<td>6</td>
<td>12</td>
<td>17</td>
<td>46</td>
</tr>
<tr>
<td>Chronic suppurative otitis media</td>
<td>5</td>
<td>4</td>
<td>6</td>
<td>3</td>
<td>—</td>
<td>3</td>
<td>11</td>
<td>21</td>
</tr>
<tr>
<td>Chronic throat infections</td>
<td>12</td>
<td>5</td>
<td>26</td>
<td>10</td>
<td>5</td>
<td>5</td>
<td>43</td>
<td>63</td>
</tr>
<tr>
<td>Total</td>
<td>17</td>
<td>9</td>
<td>43</td>
<td>30</td>
<td>11</td>
<td>20</td>
<td>71</td>
<td>130</td>
</tr>
</tbody>
</table>

**DOSAGE**

Antibiotic used in cases of chronic sinusitis was Ampicillin and in cases of chronic tonsillitis, it was tetracycline. The dosage of Septilin used was as follows: 6-12 years, one tablet 4 times a day; 12 years and above, two tablets 3 times a day.

**Treatment of Chronic sinusitis**

Septilin therapy was tried in all the 46 cases of chronic sinusitis. Out of these only 34 cases came for follow up and the remaining 12 cases were lost to follow up. The above mentioned dosage was continued for 6 weeks, and if the initial response was good, the drug was continued for three months. If the patient’s symptoms were not relieved, Septilin was given along with antibiotics.

**Treatment of Chronic suppurative otitis media**

Septilin therapy was given in all the 21 cases of Chronic suppurative otitis media. Out of these, only 12 cases came for follow up, the remaining nine cases did not report for follow up. The above mentioned dosage was given for 5 weeks. If the initial response was good, the therapy was continued for 3 months. If the patient’s symptoms were not relieved antibiotics were supplemented along with Septilin.

**Treatment of Chronic throat infection**

Cases of throat infection were further sub-divided in two sub-groups: (a) cases of chronic pharyngitis (b) cases of chronic tonsillitis. Out of 27 patients of chronic pharyngitis, 8 cases did not report for follow-up and study was carried out on 19 cases. Out of 36 cases of tonsillitis, 7 cases did not report for follow up so study was carried out only on 29 cases.

All the 63 cases of Chronic throat infection were first given Septilin therapy. Out of these, only 48 cases came for follow up. (As detailed, 15 cases were lost to follow up). The above mentioned dosage was given for 6 weeks. If the initial response was good, therapy was continued for three months. If not relieved, antibiotics were supplemented along with Septilin.
**Table II: Response of E.N.T. cases to Septilin/Septilin + Antibiotics**

<table>
<thead>
<tr>
<th>Condition</th>
<th>On Septilin alone</th>
<th>On Septilin + Antibiotics</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Response</td>
<td>Response</td>
</tr>
<tr>
<td></td>
<td>No. of cases</td>
<td>Good (78%)</td>
</tr>
<tr>
<td>Chronic sinusitis (34)</td>
<td>23</td>
<td>18 (78%)</td>
</tr>
<tr>
<td>Chronic suppurative otitis media (12)</td>
<td>4</td>
<td>1 (25%)</td>
</tr>
<tr>
<td>Chronic pharyngitis (19)</td>
<td>17</td>
<td>10 (57%)</td>
</tr>
<tr>
<td>Chronic tonsillitis (29)</td>
<td>20</td>
<td>12 (60%)</td>
</tr>
</tbody>
</table>

**DISCUSSION**

In the present study, 34 cases of chronic sinusitis were studied. Out of 34 cases, 23 were kept on Septilin only and 78% of these cases showed good response to Septilin. Eleven patients were kept on Septilin + antibiotics and 73% of them showed good response. This indicates that the response was as good with Septilin as to Septilin + antibiotics. It might be that cases of sinusitis which did not respond to Septilin and Septilin + antibiotics had irreversible changes in the sinus mucosa and required surgery later on.

In the present study, 12 cases of chronic suppurative otitis media were studied. Out of 12 cases, 4 cases were kept on Septilin only and 25% of these showed good response to Septilin. Eight patients were kept on Septilin + antibiotics and 38% of them showed good response. This indicates that there was better response to Septilin + antibiotics than to Septilin alone.

In the present study, 19 cases of chronic pharyngitis were studied. Out of 19 cases, 17 cases were kept on Septilin only and 57% showed good response. 2 cases were kept on Septilin + antibiotics and 50% of these showed good response. This indicates that the response with Septilin + antibiotics was not as good as to Septilin alone.

In the present study, 29 cases of chronic tonsillitis were studied. Out of 29 cases, 20 were kept on Septilin and 60% showed good response to Septilin only. (75% showed good response in the study carried by Bhatia, B.P.R. and Tayal, V.K.) 9 cases were kept on Septilin + antibiotics and 67% showed good improvement. This indicates that the response with Septilin + antibiotics was not as good as to Septilin alone.

Cases which did not respond to Septilin or a combination of Septilin and antibiotics had been submitted to operations.

In the present study, Septilin was found to be most effective in 12-35 years age group.

**CONCLUSION**

The present study shows that recurrence of ear, nose and throat infection can be minimised with the use of Septilin. Septilin is most helpful when the surgeon is in a dilemma whether to operate or not. Following Septilin therapy, associated conditions have also been found to regress. No side effects were noted in any case in the dosage employed. It is, therefore, concluded that Septilin can be an effective drug:

1. In cases in which the conditions have not reached an irreversible stage in the sinuses and middle ear.
2. In cases where the infection had not settled down in the tonsils and frequency of recurrence is not very high.
3. In cases which do not agree for tonsillectomy.
4. In cases where an operation is contra-indicated for some other underlying medical condition.
5. In cases where the effective organ is not involving any neighbouring structures viz. tonsillitis affecting sinuses or middle ear, or U.R.T.

REFERENCES