MATERIAL AND METHODS

During one year period from May 90 to May 91 a total of 1000 cases were studied. These patients were admitted to M.L.B. Medical College, Jhansi, for any surgical interventions. Details of the patient's age, sex, diagnosis, nature of operation, post-operative stay and post-operative course were carefully noted.

When infection was noticed or suspected, a sterile cotton swab dipped directly into infected wound and sent for culture to identify infective organism. At the same time, scoring of sepsis was done by modified scoring system (K.A. Elabute & M.B. Etmer) (17). In this system four classes of attributes of sepsis were chosen. They were as follows -

a) Local effects of sepsis,
b) Pyrexia,
c) Secondary effects of sepsis,
d) Laboratory data.

a) Scoring of local effects of tissue infection -

1. Wound infection with purulent discharge/entero-cutaneous fistula.
(i) requiring only light dressing changed not more than once daily

(ii) requiring to be dressed with a pack or dressing needing to be changed more than once daily or requiring application of a bag or requiring suction.

II. Peritonitis

(i) localised peritonitis

(ii) generalised peritonitis

III. Chest infection:

(i) Clinical or radiological signs of chest infection without productive cough

(ii) Clinical or radiological signs of chest infection with a cough producing purulent sputum

(iii) Full clinical manifestation of lobar/bronchopneumonia

IV. Deep seated infection (subphrenic abscess, pelvic abscess, empyema, thoracic, acute or chronic osteomyelitis).

b) Scoring of Pyrexia:
Maximum daily temp.  

<table>
<thead>
<tr>
<th>Temperature Range</th>
<th>Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>36.0 - 37.4°C</td>
<td>0</td>
</tr>
<tr>
<td>37.5 - 38.4°C</td>
<td>1</td>
</tr>
<tr>
<td>38.5 - 39.0°C</td>
<td>2</td>
</tr>
<tr>
<td>39°C</td>
<td>3</td>
</tr>
<tr>
<td>≤ 36°C</td>
<td>3</td>
</tr>
</tbody>
</table>

Minimum daily temp. ≥ 37.5°C  

Add 1

If 2 or more temp. peaks above 36.4°C in one day  

If any rigors occur in a day  

1) Scoring of secondary effects of fever:

While it was possible to define gradations of the local effects of tissue infections, pyrexia, laboratory data, the attributes listed as secondary effects can not be so graded, therefore they were treated as existence criteria and given score if present.

1) Obvious jaundice (in the absence of established hepatobiliary disease)  

2  

II) Metabolic acidosis -  

(a) Compensated  

1  

(b) Uncompensated  

3
iii) Renal failure

iv) Gross disturbance of mental orientation/level of consciousness (e.g. delirium, coma) or other focal neurological manifestation of pyrexia/septicemia

v) Bleeding diatheses (clinical basis)

d) **Interpretation of Laboratory Data**

1) Hb level in the absence of obvious bleeding -
   
   (a) 7 - 10 g/dL  
   (b) < 7 g/dL

2)  

11) Leucocyte count (10⁹/L)
   
   (a) 12 - 30  
   (b) ³ 30  
   (c) < 25

111) Platelet count (x10⁹/L)
   
   (a) 100 - 150  
   (b) < 100

1111) Plasma albumin level (g/L)
   
   (a) 31 - 35  
   (b) 25 - 30  
   (c) < 25
v) Plasma total bilirubin level in the absence of clinically obvious jaundice

\[ \geq 25 \text{ u mol/L} \]

vi) Blood culture

(a) Single positive culture

(b) Two or more positive culture separated by 24 hr.

This scoring system of sepsis was applied to patients in which sepsis was noted in the post-operative period up to the time of discharge. For scoring of sepsis each attribute was scored separately and sum of all scores gave an aggregate criterion which represented the total effect of septic state of the patient.