DISCUSSION
Published work on FNAB reports a reliability between 80 to 97 percent (Kline TB et al 1981). The accuracy of FNAB in our series (90%) is very well within this range. However we had to repeat the procedure (5-10%) in 25 percent cases which is sufficiently higher than what has been repeated by others (Ferguson et al 1938). There are as many published reports (Burrival 1975) where the proportion of unsatisfactory smear is high between 20-30 percent. We could not obtain adequate aspiration smears only in 9 percent cases. Safety of the procedure is very well proven at present (Martín and Stewart 1936), we also could not observe any complication in our series in any case.

**Breast**

FNAB allows fuller investigation and wiser preoperative discussion than was possible when excisional biopsy and frozen section confirmed the clinical diagnosis. FNAB possesses the following specific advantages in the management of breast lumpiness or a discrete palpable lesion (Webb, 1981).

1. Confirmation of the presence of cancer in a clinically likely case.

2. Combined with clinical examination, mammography, where and when appropriate and more recently Doppler Ultrasound
FNAB indicates management of mammary dysplasia with added confidence and avoidance of inappropriate surgical intervention (Cornillet et al., 1971).

3. FNAB may be treatment of choice for breast cysts by emptying (Fatey & Murick, 1953).

4. In presence of four quadrant and/or inflammatory lesions where both excisional/incisional biopsy are initially unwise, FNAB is ideally suited and particularly accurate.

Webb (1975) reported accuracy rate of 96.9 percent in breast cancer, however in non-malignant group it was 97.4%. Other published series have indicated comparable accuracy at around 90% (Zaidela 1967; Rajic, 1971).

In our study, 31 cases of breast lump were examined by FNAC smear. It was positive in 28 cases (90.32%). Diagnostic accuracy in breast lumps in our study was 100%. So, FNAC in cases of breast is very useful.

Abdominal lumps

We studied 25 cases of intraperitoneal and retroperitoneal lumps, out of which 14 (82.35%) concomitant biopsy was performed. We observed 100% accuracy of ABC in diagnosing these lumps. According to Masartijerna (1979), the abdominal indication for FNAB is infrequent, but Well (1982) reported that in 18 cases out of 20 abdominal lump cases in which ABC was performed histology was confirmed by autopsy. Our result emphasizes that cumbersome diagnostic procedures and diagnostic laprotomies might be avoided by
Kidney lumps

In Stockholm, (von Schreeb et al, 1987) it is local practice to confirm and grade renal cancer by FNAC.

In our study we have examined two cases of renal lumps. Aspiration was positive in both cases (100%). Diagnostic accuracy was also 100%. We conclude that FNAC is very useful in the diagnosis of renal lumps.

Salivary glands

In our series, FNAC emerged as an excellent means of diagnosing the swelling of salivary glands. Clinical examination of parotid lesions is far less accurate than for breast lumps. (Ratly and Rand 1952, Shaw & Friedman, 1959, Thackray & Lucas 1974).

In our study, two cases of parotid swelling were examined by FNAC, which were compared by histopathological examination. FNAC results were accurate in both cases 100%. Similar results were found in cases of submandibular gland swellings. The reported cytological accuracy of salivary gland lesions for neoplasms is about 98% (Angell & Laspri 1971).

Lymph nodes

Angell et al (1971) found 89% cytological accuracy in cases of non malignant lymph nodes. However, the reported accuracy of diagnosing malignancy and lymphoma is 96% and 94% respectively (Ferguson 1930, Webb, 1970). According to
Andrew flent et al (1986), cytologic features of Hodgkin's disease are not only characteristic, but are also diagnostic.

In our series of 36 patients, we could observe 100% accuracy in diagnosing malignancy and lymphoma.

In one case of cervical lymphadenopathy we found microfilaria in the smear.

**Thyroid swelling**

A John webb (1982) who examined 330 cases of thyroid by FNAB with one failed aspiration, it was accurate in as much as 191 cases who could be confirmed by histology.

Overall diagnostic accuracy of FNAB in Goitre cases by different authors has been shown below.

Overall diagnostic accuracy of FNAB by different workers compared with the present study.

<table>
<thead>
<tr>
<th>Author and year</th>
<th>No. of cases</th>
<th>Diagnostic accuracy</th>
<th>False positive</th>
<th>False Negative</th>
</tr>
</thead>
<tbody>
<tr>
<td>*Traxell and Foote (1958)</td>
<td>98</td>
<td>70%</td>
<td>-</td>
<td>26%</td>
</tr>
<tr>
<td>Einhorn and Fransen (1962)</td>
<td>216</td>
<td>90%</td>
<td>-</td>
<td>2%</td>
</tr>
<tr>
<td>Nilsson and Fersen (1964)</td>
<td>48</td>
<td>100%</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>**Lowhagen and Sprenger (1974)</td>
<td>60</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Frable (1976)</td>
<td>20</td>
<td>95%</td>
<td>-</td>
<td>3%</td>
</tr>
<tr>
<td>Lowhagen et al (1979)</td>
<td>412</td>
<td>97%</td>
<td>-</td>
<td>2.2%</td>
</tr>
<tr>
<td><strong>Present study</strong> (1986)</td>
<td>4</td>
<td>100%</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
* In 3%, the results of aspiration biopsy were uncertain.
** The authors made a correlative study without actually mentioning the accuracy rate of diagnosis or other pitfalls in diagnosis.

B. Ghoshal et al. (1984) reports an accuracy of about 93%. In the remaining 7% of cases it was failed aspiration.

In our study, we could examine only 8 cases of thyroid swelling. Aspiration was positive in 5 cases (62.5%). In all these cases, the histopathological diagnosis tallied with FNAB report giving an overall accuracy of 100%.

**Soft tissue tumours**

Soft tissue cytology is an advancing field and its benefits for surgical practice, histological exactitude and the advance of errors in management deserve greater recognition.

In our study of 8 cases of soft tissue tumours, we made similar diagnosis by ABC and excisional biopsy. In all the seven cases, where adequate tissue aspirate for cytology was obtained. Available literature on this aspect reports over all diagnostic accuracy being 12%, while that of neoplasm is being 85%.

**Prostate**

In our study, we could examine only 3 cases of prostatic enlargement. The positivity rate of FNAC was
66.6% and accuracy rate was 100%. The available literature shows 90% accuracy rate in cases of Prostate (Steether et al 1975).

**Miscellanea**

In our study of 4 cases of various lumps, we found positive aspiration in all cases (100%), and the accuracy rate was also (100%). The histopathological findings were same in all cases.