## RESULTS

## Results

The cases of infertility included in this study belonged to different ages ranging from 17 to 42 years. Cases were classified into different age groups as shown in tables 1 and 2.

Table 1: Age incidence with primary infertility

| Age (years)    | No. | 9    |
|----------------|-----|------|
| 15 - 20        | 23  | 14.4 |
| 21 - 25        | 63  | 39.4 |
| <b>26 -</b> 30 | 56  | 35   |
| 31 - 35        | 16  | 10   |
| 36 - 42        | 2   | 1.2  |
| Total          | 160 | 100  |

Table 2: Age incidence with secondary infertility

| Age (years) | No. | 8    |
|-------------|-----|------|
| 15 - 20     | 0   | 0    |
| 21 - 25     | 12  | 30   |
| 26 - 30     | 17  | 42.5 |
| 31 - 35     | 7   | 17.5 |
| 36 - 42     | 4   | 10   |
| Total       | 40  | 100  |

The duration of infertility varied from 2 to 20 years. The mean duration was 5.2 years.

Microscopic examination of premenstrual endometrial biopsies of cases revealed different endometrial patterns as shown in tables 3 and 4.

Table 3: Different endometrial patterns with primary infertility.

| Endometrial pattern   | No. of cases |  |  |  |  |
|-----------------------|--------------|--|--|--|--|
| Normal secretory      | 100          |  |  |  |  |
| Hormonal disturbances | 49           |  |  |  |  |
| Inflammatory          | 11           |  |  |  |  |
| Total                 | 160          |  |  |  |  |

Table 4: Different endometrial patterns with secondary infertility.

| Endometrial pattern   | No. of cases |
|-----------------------|--------------|
| Normal secretory      | 21           |
| Hormonal disturbances | 15           |
| Inflammatory          | 3            |
| Adhesi ve             | 1            |
| Total                 | 40           |

Tables 5 and 6 shows different aetiologic factors of infertility as detected from endometrial biopsies.

Table 5: Aetiology of primary infertility.

|             | Aetiology .                  | No. of cases |
|-------------|------------------------------|--------------|
| *           | Not evident                  |              |
|             | Normal secretory             | 100          |
| *           | Hormonal disturbances        |              |
|             | Proliferative                | 25           |
|             | Cystic glandular hyperplasia | 4            |
|             | Inactive                     | 2            |
|             | Luteal insufficiency         | 18           |
| 失           | Endometritis                 |              |
|             | Chronic non specific         | 6            |
|             | Tuberculous                  | 4            |
|             | Bilharzial                   | 1            |
| <del></del> | Total                        | 160          |

Table 6: Aetiology of secondary infertility.

|       | Aetiology                    | No. | of cases |
|-------|------------------------------|-----|----------|
| *     | Not evident                  |     |          |
|       | Normal secretory             |     | 21       |
| 太     | Hormonal disturbances        |     |          |
|       | Proliferative                |     | 5        |
|       | Cystic glandular hyperplasia |     | 1        |
|       | Atrophic                     |     | 1        |
| -<br> | Luteal insufficiency         |     | 8        |
| 大     | Endometritis                 |     |          |
|       | chronic nonspecific          |     | 3        |
| *     | Asherman syndrome            |     | 1 .      |
|       | Total                        | ,   | 40       |

Accurate endometrial dating was done to the cases which shown secretory activity. We found dating within normal in 121 cases (normal secretory), difference in endometrial dating in relation to the day of taking the biopsy in 26 cases (luteal insufficiency).

Table 7 shows the difference between the two dating in cases of luteal insufficiency.

Table 7: Endometrial dating in cases of luteal insufficiency:

| No. of cases | Day of taking the biopsy | Microscopic dating |       |     |    |       |   |       |     |    |      |
|--------------|--------------------------|--------------------|-------|-----|----|-------|---|-------|-----|----|------|
| 7            | 25                       | 4                  | cases | 21- | 22 | days, | 3 | cases | 15- | 16 | days |
| 8            | 26                       | 5                  | cases | 21- | 22 | days, | 3 | cases | 15- | 16 | days |
| 5            | 27                       | 3                  | cases | 23- | 24 | days, | 2 | cases | 17- | 18 | days |
| 6            | 28                       | 4                  | cases | 23- | 24 | days, | 2 | cases | 19- | 20 | days |

The available clinical data were correlated with histopathological finding in table 8.

Table 8: Available clinical data in correlation with histopathology.

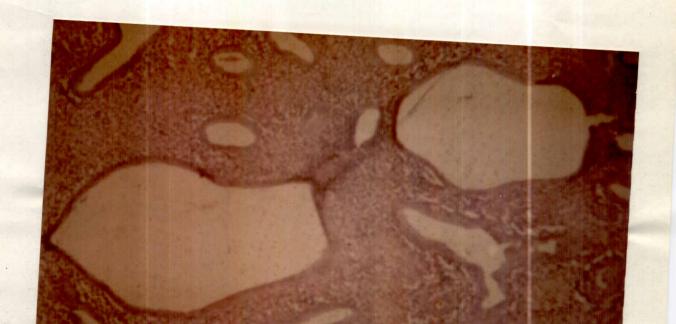
| Clinical data<br>Histopathology | Regular<br>cycles | Amen. | Oligo. | Menor. | Irr. Bl.       | No. | 8    |
|---------------------------------|-------------------|-------|--------|--------|----------------|-----|------|
| Normal secretory                | 117               | _     | 2      | 2*     |                | 121 | 60.5 |
| Proliferative                   | 4                 | 6     | -      | 8      | 12**           | 30  | 15   |
| Cystic gl. hyperplasia          | -                 | -     | -      | 3      | 2              | 5   | 2.5  |
| Inactive                        | -                 | -     | 2      | -      | . –            | 2   | 1    |
| Atrophic                        | -                 | 1     | _      | _      | . <del>-</del> | 1   | 0.5  |
| Luteal insufficiency            | 18                | -     | 5      | 3      | _              | 26  | 13   |
| Chronic non-specific            | 6                 | -     | 2      | 1      | <del>-</del>   | 9   | 4.5  |
| Tuberculous                     | -                 | 1     | 1      | 2      | -              | 4   | 2    |
| Bilharzial                      | -                 | -     | 1      | -      | -              | 1   | 0.5  |
| Adhesive                        | -                 | -     | 1      | -      | <u> -</u>      | . 1 | 0.5  |
| Total                           | 145               | 8     | 14     | 19     | 14             | 200 | 100  |

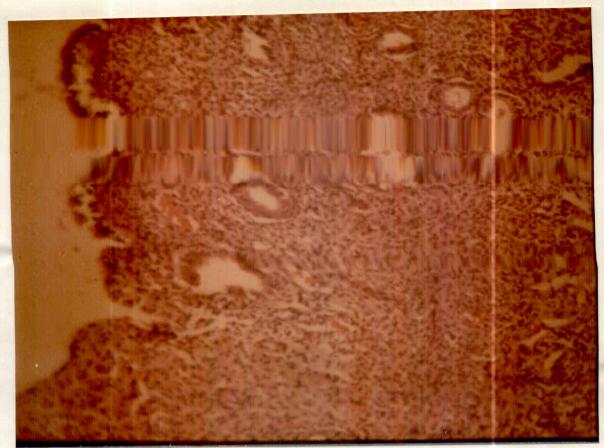
<sup>\*</sup> These cases had also fibroid.

<sup>\*\* 6</sup> of these cases had also hirsutism.



Fig. 1: Proliferative endometrium. The glands show pseudostratification and epithelial mitosis. The stroma is compact and shows some mitotic activity. Hx.&E.X100





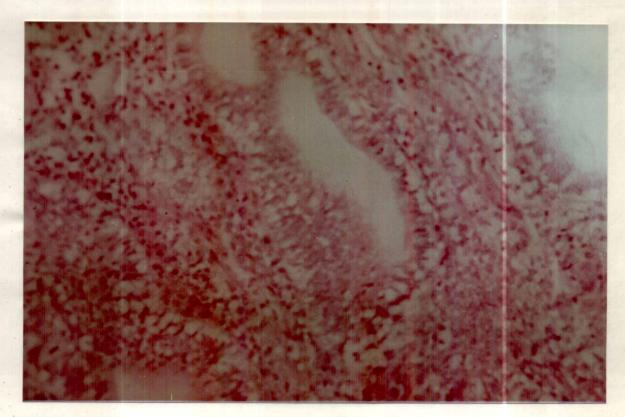


Fig. 4: Inadequate luteal response, an endometrium showing early secretory activity (15- 16 day), although curettage was on day 25. Hx. & E. X120.

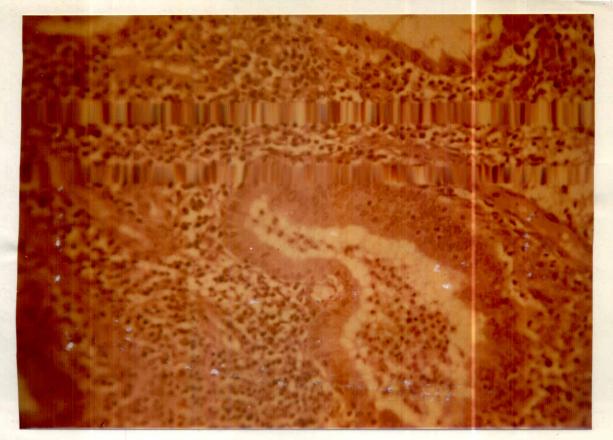


Fig. 5: Chronic non specific endometritis, showing heavy

infiltration of the stroma by chronic inflammatory cells. The inflammatory exudate is seen in the lumen of the glands. Hx.&E. X120.



Fig. 6: Tuberculous endometritis. A well formed tubercle with Langhans' type giant cells. Hx.&E. X100

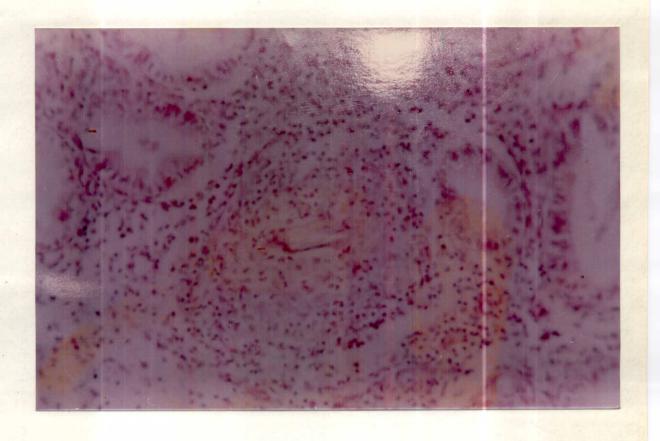


Fig. 7: Schistosomiasis of the endometrium showing an ovum surrounded by granulomatous reaction. Hx.&E. X 120