CONCLUSION

Following conclusions were drawn from this study:-

1. Formalin fixed, paraffin embedded upto five years old or more breast block tissue sections could be used for demonstrating specific peptide hormone binding sites.

2. The immunostaining was mainly intracellular and was heterogeneously distributed.

3. The breast carcinoma tissue slices showed more consistent immunostain as compared to benign breast disease. Since PRL binding sites were more commonly seen in the carcinoma breast tissue, one cannot exclude the possibility of the role of PRL in mammary tumourigenesis.

4. Apocrine changes in epithelial lining had specific PRL binding sites. This finding may also suggest a role of PRL in the etiology of breast cancer through the induction of apocrine change as the later is associated with an increased risk of cancer.

5. PRL binding sites were present in greater proportion in peri and post menopausal breast cancer patients.

6. PRL binding sites could also be determined in cytology smears which results in cells sufficient for immunostaining.

7. The results of immunocytochemistry on FNAC smears are comparable with that of histologic sections. Thus FNAC being economical, quick and non traumatic procedure could be more readily used for the hormonal study.

8. This study has demonstrated low amount of PRL-R in crude malignant breast tissue membrane preparations.