SUMMARY AND CONCLUSIONS
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The histomorphological study on foetal suprarenal gland was conducted in the department of Anatomy, M.L.M. Medical College, Jhansi. The study included 44 aborted foetuses without any malformations ranging from 80 mm C.R. length to 320 mm C.R. length of either sex, collected from the department of Obstetrics and Gynaecology.

After taking different measurements of foetuses, the study of external morphology and histology of suprarenal gland was carried out by using Haematoxylin and Eosin, Toluidine blue, PAS and Masson's trichrome stains. On the basis of above study following conclusions are drawn:

1. The foot length and head circumference increased with increasing C.R. length of the foetuses.

2. The size and weight of the suprarenal gland increased with increasing period of gestation.

3. The suprarenal glands were applied to the upper pole of their respective kidneys.

4. Right suprarenal glands were diamond shaped whereas the left glands were semilunar in shape.
5. The colour of the gland changed from whitish pink to dark red with increasing age of gestation.

6. Number of suprarenal arteries were ranging from 2 to 3.

7. Single vein drained the individual suprarenal gland.

8. The capsule was well developed at 30 mm C.R. length and was made up of fibroelastic tissue.

9. Both straight and wavy nature of the capsule was observed.

10. Capsular nuclei were elongated or crescentic in shape.

11. Blood vessels, nerves, capsular ganglia and ectopic cortex were also noticed in the capsule.

12. Pericapsular tissue increased with advancing gestational age. At full term there was well developed pericapsular pad of fat.

13. Permanent cortex consisted of irregularly placed cells with basophilic cytoplasm and darkly stained circular, centrally placed nucleus.

14. Height of permanent cortex increased with increasing age of gestation.
15. The sinusoids in permanent cortex are round circular or oval in shape filled with nucleated and non-nucleated red blood corpuscles.

16. The provisional cortex (foetal cortex) occupied nearly 3/5th of the total cortex at 30 mm C.R. length of foetuses.

17. The provisional cortex consisted of spongiocytes, ganglion cells, chromaffin cells and fat cells.

18. The sinusoids of the provisional cortex were oval or elongated, some of them anastomosing with each other, filled with nucleated and non-nucleated red blood corpuscles.

19. Areas of focal necrosis were observed after 120 mm C.R. length.

20. At full term most of the provisional cortex was replaced by permanent cortex.

21. The sinusoids of permanent cortex, provisional cortex and medulla were devoid of muscular tissue.

22. At 125 mm stage large spaces filled with reticulum network surrounded by chromaffin cells were observed in the provisional cortex and at corticomedullary junction.
23. The medulla was not very well differentiated at 80 mm stage.
24. Later, the medulla consisted of chromaffin cells, ganglion cells, astrocytes and rimmed fibres.
25. Initially the chromaffin cells in the medulla were arranged in groups but with increasing foetal age they were scattered.
26. In one specimen at 160 mm stage, the capsular tissue was observed embedded in the medulla along-with chromaffin cells in between the capsular fibres.

Considering the above findings of present study, it could be concluded that all the parameters of foetal suprarenal glands were in increasing order, except the amount of provisional cortex, with advancing C.E.L. length and foetal age. The presence of ectopic cortex as late as 240 mm C.E.L. length clearly shows that either it is in the process of migrating towards permanent cortex or to form accessory suprarenal gland. Permanent cortex gradually increased at the expense of provisional cortex. The necrotic patches in the provisional cortex indicate that the resolution of suprarenal gland starts during intraterine life. The organisation of the medulla continued till the end of gestation by continuous inflow of chromaffin cells. The presence of capsular tissue in the medulla
clearly shows that the neural crest cells, while migrating towards medulla from the periphery drag the capsular tissue along with them which appears to be utilized in the further organisation of the medulla.