

HISTOMORPHOLOGICAL STUDY OF LYMPHOID ORGANS IN FETUSES

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Summary

SUMMARY

In the present study, development of the lymphoid organs thymus, spleen, lymph node, palatine tonsil and peyer's patches were studied histomorphologically in developing fetuses.

Thymus developed initially in the region of neck and then migrated to anterior mediastinum. Lymphocytes first appeared in the thymus at the 9th week, trabeculae developed from the 9th week onwards, lobulation started to develop at the 9th week and continued till the 12th week, corticomedullary differentiation was apparent during the period of 9th to 14th week, Hassell's corpuscles first appeared at the 15th week.

In the spleen, initially capsule was found to be single layered which became multilayered from 15th week onwards. Trabeculae started developing from 18th week onwards, lobulation occurred from 15th to 17th week, white pulp started appearing at the 25th week and red pulp from the 9th week onwards.

Lymph nodes develop in the lymph sac which appeared at the 9th week, early lymph node developed around 15th to 17th week in these sacs.

Late lymph nodes

appeared during 18th to 24th week, corticomedullary differentiation occurred at 25th to 38th week, multiple venules or efferent lymphatics were found at around hilum at 25th to 38th week.

Palatine tonsil developed between the two palatine arches. Initially, the epithelium was single layered at the 11th week, from the 12th week multi layered epithelium appeared, epithelial invaginations appeared from 12th to 14th week, epithelial canal formation appeared during the period of 15th to 17th week, lymphocytes first appeared at the 15th week while lymphoid follicles appeared from 25th to 38th week. No germinal center ever appeared in the developing Palatine tonsil.

In the intestine, lymphocytes in the villi were first visualized at the 12th week, in the lamina propria at the 14th week, and aggregated in the form of peyer's patches at 15th to 17th week. Increased number of aggregates were seen from the 18th to 24th week.