Conclusion: The knowledge about this association between NSD and mastoid pneumatisation in adult population is of great importance to Otolaryngologist to consider NSD correction before treating middle ear problems surgically.

Conflicts of interest

The authors have none to declare.

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Effects of methotrexate on ovary: An experimental study on albino rats

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Aims and objectives: The aim of the present study was to find out detailed histopathological changes in ovary after exposing the experimental rats to therapeutic dose of methotrexate.

Material and methods: Twelve female albino rats 6 experimental and 6 control received methotrexate (in former) and normal saline (in latter), 1 mg/kg, intraperitoneally for 6 weeks. H/E staining was done.

Results: H/E stained sections from ovary of experimental rat showed poorly developed Graffian follicles with loss of ova. There were follicular spaces in these rats with albuminous fluid and inflammatory cells. Granulosa lutein cells also showed degeneration due to inflammation. Cells were found to be smaller, shrunken and irregular with vacuolated lighter colour cytoplasm.

Conclusion: We concluded, therefore that the drug is safer to be used in those patients who have completed their family.

Conflicts of interest

The authors have none to declare.

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Association of high endothelial venules and intraepithelial lymphocytes in human postpartum fallopian tube: A light and TEM study

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Aims and objectives: The Fallopian tube (FT) is considered to be a part of mucosa associated lymphoid tissue (MALT). High endothelial venules (HEVs) are concerned with lymphocyte trafficking in secondary lymphoid tissues. The aim of the present study was to look for the association of HEVs and intraepithelial lymphocytes (IELs) in mucosa of the human postpartum Fallopian tube.

Material and methods: The ampullary part of the FTs obtained from ten women who underwent lower segment caesarean section with sterilization was processed for electron microscopy. HEVs per 4 mm^2 of mucosa and IELs per 100 mm length of the epithelium were counted for each sample in semithin sections using cellSens image analysing software under light microscope. The structure of HEVs, lymphocyte trafficking were studied under transmission electron microscope. The association of the IELs with HEVs was looked for. The data obtained was statistically analysed using SPSS version 17.0.

Results: The mean number of HEVs per mm^2 of the mucosa of human postpartum FT was 19.23 ± 7.05 and IELs per 1 mm length of epithelium was 7.71 ± 3.01. There was a significant positive correlation between the number of IELs and HEVs ($p < 0.001$) and IELs regressed on HEVs with the regression coefficient of 42.002. Migration of lymphocytes through mucosal HEVs and their association with the dendritic cells was also observed under electron microscope.

Conclusion: The presence of IELs, HEVs and the significant correlation between them confirms that FT is a member of MALT and that HEVs are the migratory route of lymphocytes in postpartum FT.

Conflicts of interest

The authors have none to declare.

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Histological study of internal thoracic, gastroepiploic and coronary arteries as relevant in coronary artery by-pass grafts

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Aims and objectives: The potential relation between the structure of the media and the development of intimal hyperplasia may have an impact on the long term patency of arterial conduits used for myocardial revascularization. So the morphmetric and histological analysis with emphasis on their suitability as arterial conduits were performed on the internal mammary and gastroepiploic arteries and were compared with the coronary arteries harvested from the same individual.

Material and methods: The vessels were harvested in 15 autopsy cases and examined using light microscopy after H&E staining. Morphometric analysis was done and histological characteristics of internal mammary and gastroepiploic arteries were studied and compared with those of coronary arteries.

Results and conclusion: Coronary arteries, their branches and gastroepiploic arteries are muscular arteries. Aging of muscular arteries results in intimal thickening which was observed in all the coronary arteries with mild intimal thickening in 2 of the left gastroepiploic arteries whereas in right gastro epiploic artery was normal in all the cases. Intimal thickening was observed in 2 cases of left internal thoracic artery whereas it was normal in right internal thoracic of all the cases. Internal elastic lamina showed prominent folding at multiple sites along the circumference in right and left internal thoracic arteries in all the cases.

Conflicts of interest

The authors have none to declare.

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