Joint Medical Program (JMP)

Anatomical Pathology

Road map

The following road map is to be used by students as a guide and by educators as a framework for fixed resource sessions and clinicopathological case studies.

Any standard pathology textbooks such as the Pathologic Basis of Disease by Robbins and Cotran (Saunders), Rubin's Pathology by Rubin and Strayer (Lippincott, Williams & Wilkins), Muir's Textbook of Pathology by Levioson et al (Hodder Arnold), General and Systematic Pathology by Underwood & Cross (Churchill Livingstone) and A Textbook of Pathology by Vardaxis (Mosby) could be used in understanding the road map. This road map forms the foundation of pathology in the Joint Medical Program.

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Pathological processes

Basic understanding of the aetiology (cause of disease), pathogenesis (mechanism of disease development), morphologic changes (structural alterations in cells) and clinical significance (functional consequences of the morphological changes) of the following pathological processes is essential to the study of medicine.

1. Cellular adaptation, cell injury and cell death
2. Inflammation
3. Tissue renewal and repair
4. Haemodynamic disorders
5. Genetic disorders
6. Diseases of immunity
7. Neoplasia
8. Infectious diseases
9. Environmental and nutritional diseases

System diseases

Basic understanding of the aetiology (cause of disease), pathogenesis (mechanism of disease development), morphologic changes (structural alterations in cells) and clinical

significance (functional consequences of the morphological changes) of congenital and acquired (degenerative, inflammatory, haemodynamic, neoplastic, infective, etc) diseases of the following areas is essential to the study of medicine. Prior knowledge of the embryology, anatomy, histology and physiology of these organs is also essential.

1. Blood vessels
2. Bones, joints and soft tissues
3. Breast
4. Central nervous system
5. Endocrine system
6. Eye
7. Female genital tract
8. Gastrointestinal tract
9. Head and neck
10. Heart
11. Infancy and childhood
12. Kidney
13. Liver and biliary system
14. Lower urinary tract
15. Lung
16. Male genital tract
17. Pancreas
18. Peripheral nerve and skeletal system
19. Red and white blood cells, lymph nodes, spleen and thymus and bleeding disorders
20. Skin