Venue: ANUKIS
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1515-1630 hr

Symposium 2D: Problem areas in surgical pathology

S2D-1. Diagnostic issues in gastrointestinal pathology

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Although the diagnosis of most surgical pathology entities of the gastrointestinal (GI) tract is usually straight forward, there are a few broad areas that may sometimes prove problematic. Some of the commonly encountered problem areas that will be discussed in this presentation include the diagnosis of colitis, dysplasia in inflammatory bowel disease, malignancy in a distorted adenoma and identification of clinico-pathological features of malignancy that may have genetic predisposition and hence implications for genetic screening of patient family members. The widespread use of endoscopic biopsies in gastroenterology provides a major component of the workload in both public hospital and private pathology practices but the small amount of diagnostic material available can sometimes itself becomes a problem. The latter and the implications in clinical practice in an increasingly litigious environment will also be discussed.

S2D-2. Classification of and approach to interstitial lung disease

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Interstitial lung disease incorporates a wide range of diverse pathological entities, generally fibro-inflammatory diseases which diffusely involve both lungs and have similar clinicopathophysiological features (dyspnoea and reduced gas transfer, lung volumes and compliance). Incorporating over 200 recognised clinical entities, many are extremely rare; in some the aetiology is known but in over 70% the disease is idiopathic. Diffuse lung diseases may be grouped as follows: disease of known aetiology (caused by drugs, environmental factors or autoimmune disease), granulomatous lung diseases (causes known or not), a group of diverse conditions, usually with distinctive histology and, the so-called idiopathic interstitial pneumonias, the focus of this lecture. In all these diseases the pathological process (inflammation variably leading to fibrosis) occurs largely but not exclusively in the interstitium of the alveolar walls, septa and around bronchovascular bundles, may be acute, subacute or chronic inflammatory in nature, and the degree and type of inflammation may determine the presentation of the disease; the likelihood of fibrogenesis largely determines the long-term prognosis. Pathologically the idiopathic interstitial pneumonias comprise seven distinctive HISTOLOGIC PATTERNS of disease: Diffuse alveolar damage (DAD) – an acute disorder; Non-specific interstitial pneumonia (NSIP), Organising pneumonia (OP), Respiratory bronchiolitis (RB), Desquamative interstitial pneumonia (DIP), Lymphoid interstitial pneumonia (LIP) – all sub-acute in nature; and Usual interstitial pneumonia (UIP) – a chronic disorder. Remember! These are pathological patterns. They may be seen in a number of clinical situations/diseases where drugs, environmental or autoimmune causes are known and 'define' the diagnosis. When the cause is unknown, these pathological changes define the clinicopathologic diagnosis of the idiopathic interstitial pneumonias thus: (histologic pattern:clinicopathologic diagnosis), DAD - Acute Interstitial Pneumonia, NSIP - Non-Specific Interstitial Pneumonia, OP – Cryptogenic

Organising Pneumonia, RB – Respiratory Bronchiolitis Interstitial Lung Disease, LIP – Lymphoid Interstitial Pneumonia and UIP – Idiopathic Pulmonary Fibrosis / Cryptogenic Fibrosing Alveolitis. The patholologic distinction between these patterns will be discussed, as will a newly proposed entity, so-called airway-centred interstitial lung disease.

S2D-3. Placental Pathology

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Placenta is usually left in limbo for someone to make a decision regarding their submission. The uncertainty is compounded by the fact that not all placenta require examination as most pregnancies are normal. However, a concise guide for handling and submission is required. Due to cost constraints, obstetricians must decide whether submission is necessary based on clinical, neonatal and placental observations. Inherent in this is that the obstetrician understands the placentas. If no obvious need for submission, at least an accurate recording of the gross description is made. The clinicians should make a more salient observation than "the placenta was delivered intact". A complete clinical history with gestational age are vital information. There are numerous changes seen on histology. Definite changes refer to specific lesions known to have contributed to the fetal complications or even death. Examples of such lesions are infarction, acute atherosis with infarction, retroplacental hemorrhage, chorioamnionitis, villitis and arteriovenous malformation. There are lesions or changes seen on histology which are suggestive of an underlying disease. They include acute atherosis without infarction, meconium laden macrophages, fetal artery thrombosis, single umbilical artery, Tenney-Parker changes, nucleated red blood cells, intervillous thrombosis, perivillous fibrin deposition, intervillous neutrophils, villous edema, trophoblastic inclusion and choriangiosis. In a study on the histology of the placenta from stillborns between 1996 and 1998, definite lesions were seen in 89 placentas and 57 placentas showed changes which suggested an underlying disease in each mother. At present, in HUKM, histological examinations are routinely done on placentas whose pregnancy or delivery are eventful. Between the year 2003 and 2006, 149 placentas were histologically normal although there were minor problems during conception or delivery. However, definite lesions were seen in 504 cases and lesions or changes suggesting an underlying disease were seen in 278 placentas. These positive findings had assisted the clinicians in the management of subsequent pregnancies.