P-106 Imaging the submandibular gland and space in children - normal appearances and pathology Sacha Pierre; Teresa Kelly; David Howlett

Royal Sussex County Hospital, Brighton and Sussex University Hospitals NHS Trust; Children's Hospital Wisconsin; Eastbourne District General Hospital

Aim: To provide an understanding of normal imaging appearances, anatomy and specific pathological appearances of lesions in the paediatric submandibular gland and space.

Content: A quick review of the embryological, anatomical and imaging features that define the submandibular space (SMS) along with a systemic approach in localising and characterising paediatric SMS lesions using various imaging modalities, specifically ultrasound.

Relevance: There are a wide variety of lesions that may arise from the submandibular gland or from adjacent structures. Early encapsulation of the submandibular gland (SMG) makes it relatively impervious to pathology from surrounding structures. Determining whether a lesion is intra or extraglandular using specific landmarks and then categorising the lesions based on appearances (namely cystic, solid, complex or vascular with further subcategories).

Outcomes: SMS lesions can be localized by checking for displacement of the anterior facial vein (AFV) which serves as a useful landmark in determining whether the lesion is extra or intraglandular. Further categorisation into subgroups of congenital, infectious/inflammatory, vascular, post traumatic and tumours based on history, location and imaging appearances enable better diagnosis therefore enabling appropriate and timely management with avoidance of further unnecessary investigations.

Discussion: There is a wide spectrum of submandibular space pathology that can affect the paediatric patient. Differentiating between intra or extraglandular lesions, knowledge of the most common differentials and appearances of different pathologies using current imaging aid in the correct diagnosis of these lesions.

Clinical: Multisystem disorders

P-107 Extra-medullary haematopoiesis: A pictorial review of its typical and atypical locations in our practice F Wotton; Ajay Sahu; E Rees; A Galea; M Williams

Plymouth Hospitals NHS Trust

Introduction: Extramedullary hematopoiesis (EMH) is the formation of mature red bloods cells outside of the skeletal system as a compensatory mechanism in patients with myelofibrosis and in hemoglobinopathies (especially thalassemia and sickle cell disease). As a result various extramedullary sites take on the role of blood formation.

Presentation/imaging findings: Extramedullary hemopoiesis favors certain sites such as the liver, the spleen, and the paraspinal regions of the thorax. However, in addition to these common sites of extramedullary hemopoiesis, the process can involve virtually any organ or tissue (usual locations eg. liver, spleen, lymph nodes, paravertebral regions and unusual locations such as intra-spinal canal, pre-sacral region, nasopharynx and paranasal sinuses). It can often manifest as a mass mimicking a neoplasm and then it can be symptomatic and may cause significant symptoms to the patients. The various imaging appearances of EMH will be presented and discussed to help guide the interpreting radiologist.

Educational and teaching points: In addition to common manifestations of EMH, unusual examples such as focal liver and splenic lesions, renal parapelvic soft-tissue masses, musculoskeletal masses, testicular lump etc are identified. EMH in unusual locations need to be monitored with follow-up imaging. Imaging characteristics included the presence of gross fat. Follow-up imaging studies demonstrated the evolution of soft-tissue masses into fatty masses

Conclusion: Familiarity with the possible manifestations of EH will aid radiologists in the interpretation of imaging studies in patients with chronic anemia. In some cases, unnecessary additional tests or interventions may be avoided.

P-108 Manifestations of extra pulmonary lymphoma: A pictorial review

<u>Tarig Adlan</u>; Gemma Miles; Sahil Chhabda; Hasan Nizami; Joaane Gormally; R D Riordan *Plymouth Hospitals NHS Trust*

Introduction: Lymphoma is multisystem malignant disorder arising as a consequence of malignant proliferation of lymphocytes. The site of origin varies from lymph nodes, bone marrow, spleen or other parts of the body. Lymphoma is broadly divided into Hodgkin and non-Hodgkin lymphoma based on the presence of Reed-Sternberg cells in Hodgkin's lymphoma.

The presentation of lymphoma is variable and can present with wide range of symptoms including fever, weight loss, anaemia, mass symptoms resulting from local compressive effect caused by abnormal nodes.

Objective: As we outlined above, lymphoma is a multisystem disorder that can affect wide range of organs and present with various clinical manifestations. We present a pictorial review of cases less commonly encountered, yet clinically important extra-pulmonary manifestations of lymphoma.

Conclusion: Recognizing the different presentations and imaging characteristics of lymphoma is of paramount importance and helps radiology trainees and radiologists consider and establish accurate diagnosis which is essential for subsequent management.

P-109 Extrapulmonary tuberculosis - re-emergence of the 'great pretender'

Emma Phelan; Kate Harrington; William Torreggiani

Tallaght Hospital, Dublin, Ireland

The aim of this poster is to illustrate the many varied imaging findings of extrapulmonary tuberculosis and the diagnostic difficulties they present.

There has been a resurgence of tuberculosis worldwide. Extrapulmonary tuberculosis (EPTB) constitutes about 15 to 20 per cent of all cases of tuberculosis in immunocompetent patients and accounts for more than 50 per cent of the cases in HIV-positive individuals. The radiologic features of EPTB mimic those of many diseases. EPTB therefore presents a difficult diagnostic challenge for the radiologist and requires a high index of suspicion, particularly in high-risk populations. Here we highlight our institutions experience with EPTB presentations.

P-110 Unusual presentations of malignant melanoma metastases: A pictorial review

Sophie Vaughan; Angharad Eynon; Vineet Bhat; Craig Parry

University Hospital of Wales, Cardiff and Vale University Health Board

Introduction: Malignant melanoma is a highly aggressive malignancy of the skin, which frequently metastasises to involve the lymph nodes and other organs in the body.

Content: We describe some of the more unusual presentations and locations of metastatic malignant melanoma, as demonstrated by proven cases collected from a large teaching hospital over a 2 year period.

Conclusion/discussion: Our pictorial review illustrates the need for a high level of suspicion, particularly in those patients with a past history of malignant melanoma, as the metastatic disease can present in unusual locations.