**Vascular Malformations**

Vascular malformations are developmental abnormalities which are composed of a combination of vascular channels: venous, capillary, lymphatic, arterial or mixed, with or without fistulae. They can involve superficial soft tissues or deep tissues including bone.

**Lipomatosis of Nerve**

Lipomatosis of nerve is non-inflammatory, hypertrophy of nerve fascicles surrounded by hyperintense adipose tissue in a diffusely thickened nerve both on T1- and T2-weighted images.

- **Lipomatosis of Nerve**
- **(Fibrolipomatous Hamartoma)**
- **Medial Lipomatosis of Nerve**, which involves internodal regions of the nerve and is noted in the 4th and 5th digits.
- **Lipomatosis of Nerve** involves the second and third rays of the hand or foot.
- **Lipomatosis of Nerve** is uncommon, non-neoplastic skeletal developmental disorder, is a chondroblastoma arising from an epiphysis.

**Granulomatous Infection in Acute Myelogenous Leukemia**

**Bacterial Infections seen in patients with acute myelogenous leukemia include cutaneous infections such as staphylococci and streptococci, cutaneous, catheter, tuberculosis and atypical mycobacteria**.

- **Gravel-iron nodule with enlarging swelling on the right palm for several weeks**.
- **12-year-old female with enlarging swelling on the right palm for several weeks**.
- **Atypical Abnormalities of the Hand and Wrist in Children: The Utility of Magnetic Resonance Imaging (MRI)**
- **Introduction**
- **Common indications for performing MRI of the hand and wrist are trauma, tendon and ligament injuries, joint infection and evaluation for osteosarcoma, bone and soft tissue tumors, and carpal tunnel syndrome**.

**Patients commonly present at birth or early childhood with median nerve involvement.**

**The upper extremity is affected in 78%–96% of cases, resulting in osseous bowing. The lesion has a propensity for involvement of the distal ulnar epiphysis, which is noted in the 4th and 5th digits.**

**Enchondromas** are common benign cartilaginous neoplasms that arise in the medullary canal due to continued growth of the residual cartilaginous remnants that are displaced from the growth plate. Enchondromas are composed of the tubercles and bony spicules of the hands and feet which comprise 50% of all enchondromas. Enchondromas are non-encapsulated, non-aggressive, central metaphyseal lesions showing a narrow zone of transition. They may cause cortical thinning and contain stippled calcified matrix. Gadoxetic acid-enhanced, coronal T1-weighted images with fat-saturation show the medullary cartilage as a thin cartilaginous cap. Coronal MPRG image (c) shows stretching and altered signal intensity of the distal ulnar epiphysis due to one side of the epiphysis to ossification and eventually confluence with the epiphysis. This appearance is typical of a holoblastic mass projecting from the epiphysis.**

**Lymphatic Malformation**

- **Lymphatic malformations** are congenital, low-flow anomalies characterized by cystic spaces filled with lymph that may communicate with the lymphatic system. They are composed of a combination of vascular channels: venous, capillary, lymphatic, arterial or mixed, with or without fistulae. Lymphatic malformations are slow flow lesions also showing high T2 signal. The macrocystic malformations show characteristic fluid-fluid levels and may show high T1 signal on contrast to the microcystic lesions which have hemorrhagic or proteinaceous content. Gadoxetic acid-enhanced, coronal T1-weighted images show the lesion extending into the palm as seen on T1-weighted images (b, c). There is no enhancement of the bony abnormalities.**

**High-Flow Arteriovenous Malformation**

- **High-flow arteriovenous malformation** is defined as a lesion which consists of vessels communicating directly between arteries and veins, with high flow velocities on Doppler ultrasound and with high signal intensity on T2-weighted images. The lesion was operated on-