Percutaneous Chemoablation

Lymphatic Malformation Ablation

Description of Procedure: Sonographically guided fluid/abscess drainage, with catheter based dual drug chemical ablation of large locules/fluid collections. Microcystic disease is treated with direct needle drainage of fluid and subsequent sclerosant injection.

Interventional radiologists at Nationwide Children’s provide world leadership in research and breakthrough development of percutaneous treatment of both macrocystic and microcystic lymphatic malformations (cystic hygroma) with greater than 95 percent efficacy in the orbit, face, neck, chest, abdomen, pelvis, extremities, penis and scrotum.

Impact: Untreated lymphatic malformations are complicated by growth of the malformation, airway obstruction, feeding disorders, pain, extremity impairment, infection, abscess drainage and hemorrhage.

Alternative Procedure: The alternative to drainage and chemical ablation is a surgical attempt at resection with potential for nerve and vessel injury, as well as 10 to 50 percent chance of recurrence.

Emulsification, Drainage and Chemical Ablation of Epidermoid/Dermoid Cysts

Description of the Procedure: Catheter directed detergent emulsification and drainage of the contents is performed under combination sonographic and fluoroscopic guidance. Catheter based dual drug ablation is performed.

Impact: Dermoid/epidermoid cysts most commonly occur in the skull, neck and orbit. Effective percutaneous treatment leaves no deformity, with scars the size of a freckle. Surgical resection can be complicated by cyst rupture, chemical ophthalmitis, extraocular muscle or optic nerve injury. Untreated dermoid/epidermoid cysts are complicated by infection/abscess development, visual disturbance/visual loss and airway obstruction in the neck.

Alternative Procedure: Cervical and orbital dermoid surgical resection may require significant surgical exploration. Orbital dermoid removal may require complete lateral orbitotomy and a combined ophthalmologic and neurosurgical team.
**Salivary Gland Ranula Ablation**

Description of Procedure: Drainage of the simple or plunging cervical ranula under sonographic guidance with direct ethanol injection for ablation of selected salivary glands, most commonly a unilateral sublingual gland, less commonly submandibular gland.

Impact: Cervical ranulas present with swallowing dysfunction, feeding dysfunction, and airway obstruction due to mass effect of the expanding ranula cyst. Ranulas proceed from simple oral ranulas to plunging cervical if untreated, with the plunging ranula dissection into multiple neck and skull base planes. If untreated, the ranulas compress the upper airway and are complicated by infection and deep neck abscess formation.

Alternative Procedure: The alternative to drainage of the ranula and salivary gland ablation is surgical neck dissection with removal of the affected sublingual or submandibular gland.

**Information**

For more information on any of Nationwide Children’s Radiology programs for your patients or practice, please call our Department of Radiology at (614) 722-2355 or the Nationwide Children’s Physician Assistance Line at 1-800-927-PEDS.

To refer patients specifically for interventional radiology treatments or procedures, please call (614) 722-2355 or send via fax to (614) 722-2332.

To schedule diagnostic radiology procedures, please call Centralized Scheduling at (614) 722-6200.