Case Study: A 22-year-old man presented with a rapidly growing mediastinal mass that was unresponsive to chemotherapy. The mass was pushing on the heart and airway with complete collapse of the left lung. Serum alpha-feto-protein was 260 ng/mL. He underwent surgical resection of the tumor. Histologically, the tumor demonstrated an extensively viable extra-gonadal germ cell neoplasm composed of mature and immature teratomatous elements in association with sarcomatous and carcinomatous components. The malignant somatic elements were intermixed with the teratomatous elements. Immunohistochemistry for cytokeratin and desmin was positive in addition to P53 over expression. SOX-2 immunohistochemistry was useful by highlighting the immature nonseminomatous components. Cytogenetics revealed 48, XY, +1, +21 and 49, XY, +1, +21 + 22 karyotypes.

Discussion: Nonseminomatous extra-gonadal germ cell tumors (NSEGCTs) of the mediastinum carry a significantly worse prognosis than teratomas with a five-year overall survival of 40%-45%. When teratomas present with overtly malignant germ cell components, they should be classified as malignant mixed germ cell tumors. Due to the pluriipotency associated with SOX-2 expression, it may explain the malignant sarcomatous and carcinomatous somatic components in our case. Teratomas with malignant transformation require complete surgical resection for disease cure, whereas NSEGCTs require surgical resection and may be candidates for chemotherapy. The distinction between teratoma with immature and malignant germ cell layers from NSEGCTs with malignant teratomatous components can be diagnostically challenging but may have an impact on prognosis as well as patient management.

249
Primary Thyroid Squamous Cell Carcinoma With Lung Metastasis
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Introduction: Primary squamous cell carcinoma (SCC) of the thyroid gland is a very rare entity representing <1% of all primary carcinomas of the thyroid gland. It affects usually older patients between the fifth and sixth decade, and is usually an aggressive entity with very poor prognosis.

Case Presentation and Discussion: In this report, we describe a 66-year-old female patient who presented for evaluation of a 1.5 cm right thyroid mass with worsening hoarseness and dysphagia over the course of 3 months. Fine needle aspiration of the thyroid mass was positive for carcinoma; further classification was precluded by non-definitive cytologic features and limited material for immunohistochecmical stains. Total thyroidectomy and central neck dissection were subsequently performed. The right thyroid lobe showed invasive poorly differentiated squamous carcinoma, positive for PAX8 but negative for thyroglobulin and TTF1, with acantholytic component and minimal focal mucin production. The entrapped thyroid tissue within the carcinoma was positive for all of the above markers, serving as “built-in” positive controls. PAX8 is expressed in thyroid carcinomas but not in head and neck squamous carcinomas. These findings are consistent with SCC of primary thyroid origin, with minimal secretory/mucin production. Chest CT scan showed numerous bilateral pulmonary nodular opacities with core biopsy revealing invasive poorly differentiated SCC consistent with metastatic disease. Neck CT scan showed 6 cm residual tumor in the glottic and subglottic areas with soft tissue invasion of C5. Patient was scheduled for chemotherapy and radiotherapy. Primary thyroid SCC has poor response to chemotherapy and total excision is usually recommended; hence, it should be differentiated from secondary involvement of adjacent SCC or metastases from other sites.

Conclusion: To the best of our knowledge, this is the first case report of primary SCC of the thyroid with lung metastasis.

250
Intratumoral Metastatic Double Primary Carcinoma: Synchronous Metastatic Tumor in Small Intestine From Colon and Endometrial Carcinoma
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Many cases of phenotypic heterogeneity of cells within tumors have earlier been reported in literature. We report a patient with characteristic intratumor double primary metastases in the small intestine. This patient was a 67-year-old African-American woman who had right hemicolectomy in 2015 for colon cancer (T3N1M0), was diagnosed with endometrial carcinoma (FIGO Grade II) and underwent robotic total abdominal hysterectomy and bilateral salpingo-oophorectomy in 2016, and was recently diagnosed with duodenal adenocarcinoma. She was referred to our hospital for Whipple procedure. Exploratory laparotomy in March 2017 revealed widespread metastasis, so instead of Whipple procedure, palliative surgery was performed, including small bowel resection with primary anastomosis. Microscopic analysis of the tumor showed double primary cancer with two different components (metastatic colon carcinoma and metastatic endometrial carcinoma) in segmental resection of the small intestine. To the best of our knowledge, this is one of the very few reports of simultaneous recurrent double metastasis in one organ from different primary origins.
251

Giant Cell Tumor of the Uterus: Report of a Rare Entity
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Giant cell tumor, a well-recognized neoplasm of bone, has seldom been described in the female reproductive tract. Osteoclast-like giant cell tumor of the uterus is an unusual entity with a morphologic and immunohistochemical profile similar and nearly indistinguishable from the osseous counterpart. In the uterus, this tumor has mostly been described in association with leiomyosarcomas and has rarely been reported without an associated epithelial or mesenchymal malignancy. We present a case of osteoclast-like giant cell tumor of the uterus in a 72-year-old woman who underwent hysterectomy and dilation and curetage for a 4.5 mm endometrial polyp. Pre-operative ultrasound demonstrated a 4.8 x 3.8 x 2.7 cm uterus, an endometrial thickness of 1.9 mm and no myometrial pathology. Hysteroscopic examination showed a normal endometrial cavity with a sessile left lateral wall polyp. Histologic examination of the endometrial curetting showed sheets of osteoclast-like giant cells admixed with mononuclear epithelioid cells in a myxoid to eosinophilic background. No cytologic atypia or mitoses were noted. Cellular proliferation index was less than 10% by Ki67 immunohistochemistry. Benign endometrial glands and stroma consistent with endometrial polyp were observed. The tumor cells were positive for vimentin, CD10, and CD68, and negative for cytokeratin AE1/AE3, CAM5.2, PAX-8, ER, PR, and SMA. A Congo red stain for the presence of amyloid was negative. Discussion of this rare entity is paramount for recognition and classification of these tumors, the latter aiding in appropriate clinical management, as the osseous counterpart is associated with an aggressive clinical behavior and course.

252

Ciliated Vulvar Cyst: Case Report of Metaplastic Origin
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Ciliated cysts of the vulva are rare, and their origin is debated within the literature. The theories suggest that these cysts may arise from Müllerian rests, mesonephric rests, metaplasia, or cystic dilation of normal vulvar glands. We present a case of a Bartholin duct cyst with ciliated epithelium. The patient is a 53-year-old postmenopausal woman who presented clinically with a mobile, non-tender, non-indurated left Bartholin duct cyst, located along the posterolateral aspect of the vaginal opening. The cyst and gland were completely excised. The specimen consisted of a 3.4 x 2.8 x 2.5 cm tan-pink, intact, unilocular smooth-walled cyst filled with green-tinged material. Microscopic examination showed a cyst wall predominantly lined by pseudostratified ciliated epithelium with focal squamous epithelium that was surrounded by and connected to acini lined by simple columnar mucinous epithelium. In addition, the cyst was surrounded by a dense chronic inflammatory infiltrate with pigment-laden macrophages. Bartholin duct cysts typically arise after occlusion and subsequent dilation of the Bartholin duct. These cysts are typically lined by transitional or squamous epithelium and less commonly by low cuboidal mucinous epithelium. These three epithelial linings are native to the Bartholin duct and gland because the normal Bartholin duct and gland is proximally lined by mucinous epithelium, distally lined by transitional epithelium, and lined by squamous epithelium at the vestibular orifice. In our case the Bartholin duct cyst was predominately lined by benign non-native ciliated epithelium and was surrounded by chronic inflammation. These findings suggest that metaplasia is a possible mechanism for the development of ciliated vulvar cysts.

253

Ovarian Sertoli-Leydig Cell Tumor Presenting With Nonspecific Symptoms, in an Elderly Patient With Family History of Gastrointestinal Stromal Tumor
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Objectives: Sertoli-Leydig cell tumors (SLCTs) of the ovary are rare sex cord stromal tumors, accounting for less than 0.1% of ovarian tumors. SLCTs typically occur in young women and usually manifest with symptoms related to androgen excess. We present the case of a 75-year-old female patient with a family history of gastrointestinal stromal tumor (GIST) in the brother.

Methods: Clinically, she presented with abdominal swelling, weight loss and severe heartburn. Computed tomography revealed a heterogeneously hypocholic, solid and cystic mass extending from the pelvis to upper abdomen, with a differential diagnosis including, mainly, an ovarian primary and GIST. The patient’s serum CA-125 was found to be 342 U/mL (reference range <35 U/mL). The patient underwent exploratory laparotomy, which revealed a 35 cm mass arising from the right ovary and focally adherent to the colon and ileum.

Results: Grossly, the mass was received partially ruptured, demonstrating a variegated appearance with tan-yellow solid and cystic cut surface, and areas of necrosis and hemorrhage. Microscopically, the tumor consisted of cellular,