

Non-Neoplastic and Functional Ovarian Cysts Follicle and luteal cysts are extremely common, usually multiple and less than 2 cm in size. Lined by follicular or luteinized cells, these cysts contain clear, serous fluid and arise from unruptured Graafian follicles or resealed follicles. While typically asymptomatic, rupture can cause peritoneal inflammation and pain. Polycystic Ovarian Disease (PCOD) affects 3–6% of reproductive-age women, presenting with numerous cystic follicles, often accompanied by oligomenorrhea, anovulation, obesity, hirsutism, and insulin resistance. Disturbances in androgen biosynthesis are implicated, leading to enlarged ovaries with cortical fibrosis and numerous subcortical cysts (up to 1 cm) exhibiting theca interna hyperplasia. Stromal hyperthecosis, a disorder of ovarian stroma primarily in postmenopausal women, is characterized by stromal hypercellularity and luteinization, manifesting as nests of cells with vacuolated cytoplasm. Clinically, it resembles PCOD, but virilization can be more severe. ## Ovarian Tumors Ovarian tumors originate from epithelium, germ cells, or sex cord stroma. 80% are benign, most occurring in women aged 20–45. Malignant tumors, primarily affecting women aged 45–65, represent 3% of all female cancers. Due to late detection and spread beyond the ovary, they contribute disproportionately to cancer deaths. ## Tumors of Surface (Müllerian) Epithelium This category encompasses most primary ovarian neoplasms, classified based on epithelial proliferation and differentiation. Increased proliferation generally indicates greater malignant potential. These tumors ultimately arise from transformed Müllerian epithelium.