

**Figure 7-1** Colonic polyp. **A**, An adenomatous (glandular) polyp is projecting into the colonic lumen and is attached to the mucosa by a distinct stalk. **B**, Gross appearance of several colonic polyps.

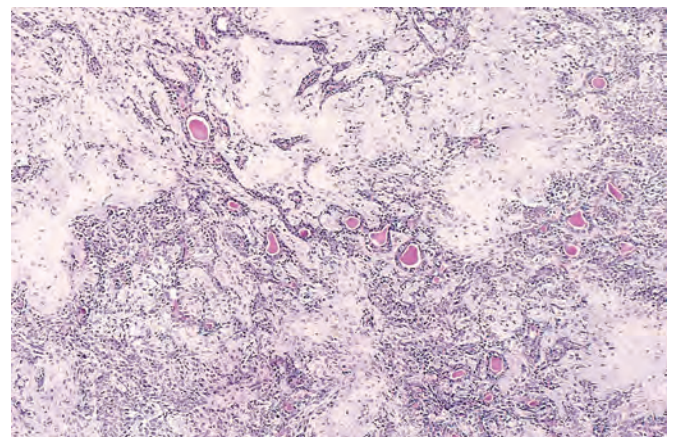
producing both epithelial and myoepithelial cells; thus, the preferred designation of this neoplasm is *pleomorphic adenoma*. The great majority of neoplasms, even mixed tumors, are composed of cells from a single germ layer. An exception is a tumor called a *teratoma*, which contains recognizable mature or immature cells or tissues belonging to more than one germ cell layer (and sometimes all three). Teratoma originates from totipotential germ cells that are normally present in the ovary and testis and sometimes also found in abnormal midline embryonic rests. Such cells can differentiate into any of the cell types found in the adult body and so, not surprisingly, may give rise to neoplasms that contain, in a helter-skelter fashion, bone, epithelium, muscle, fat, nerve, and other tissues. A particularly common pattern is seen in the *ovarian cystic teratoma (dermoid cyst)*, which differentiates principally along ectodermal lines to create a cystic tumor lined by skin replete with hair, sebaceous glands, and tooth structures (Fig. 7-3).

The nomenclature of the more common types of tumors is presented in Table 7-1. It is evident from this list that there are some inappropriate but deeply entrenched usages. For instance, benign-sounding designations such as lymphoma, melanoma, mesothelioma, and seminoma are used for certain malignant neoplasms. It is also important to recognize that ominous sounding terms are applied to some trivial lesions. *Hamartomas* are disorganized but benign masses composed of cells indigenous to the involved site. Once thought to be a developmental malformation unworthy of the -oma designation, many in fact have clonal chromosomal aberrations that are acquired through somatic mutations and on this basis are now considered neoplasms. *Choristoma* is the term applied to a heterotopic rest of cells. For example, a small nodule of well-developed and normally organized pancreatic tissue may be found in

the submucosa of the stomach, duodenum, or small intestine. The term *choristoma*, suggesting a neoplasm, imparts a gravity to these lesions that is far beyond their actual significance.

### Characteristics of Benign and Malignant Neoplasms

Nothing is more important to the individual with a tumor than being told “It is benign,” and so the differentiation



**Figure 7-2** This mixed tumor of the parotid gland contains epithelial cells forming ducts and myxoid stroma that resemble cartilage. (Courtesy Dr. Trace Worrell, University of Texas Southwestern Medical School, Dallas, Texas.)