Hydrocele

A hydrocele is an accumulation of fluid in the scrotum within the sac that surrounds the testicle, resulting in a scrotal ballooning. The mass can vary in size from an enlargement just slightly bigger than the actual scrotum to one larger than a cantaloupe.

The testes is surrounded by a sac known as the tunica vaginalis. The tunica vaginalis has an inner layer and an outer layer, with a small amount of fluid present between these 2 layers that serves a lubrication function, providing the means for the testes to rotate and move freely within the scrotum. The inner layer is responsible for the manufacture of this fluid and the outer layer for its reabsorption. This is a dynamic and ongoing process. A hydrocele is a disorder of production/reabsorption such that the outer layer of the tunica vaginalis is unable to reabsorb all of the fluid that is produced by the inner layer, and hydrocele fluid begins accumulating. The fluid content of most hydroceles is straw-colored and odorless.

Hydroceles may also result from trauma, tumors, infections, or operations such as a hernia and varicocele repairs.

Hydroceles are evaluated by physical examination and are often further characterized by an ultrasound of the scrotum, allowing for a detailed examination of the underlying testicle that often cannot be provided by physical examination because of the size of the hydrocele.

Most small and moderate size hydroceles can be managed simply by careful periodic checkups. If the hydrocele progresses the point where it causes discomfort, pain, or deformity, it can be repaired by a relatively simple surgical procedure performed on ambulatory basis.