

*Oh, What a Boar – Part 1*  
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The cavy boar has some interesting anatomy which may influence some of the disease processes we see in them or at least because these anatomical parts are present, make certain pathologic problems possible. What we will do in this article is go over some of the anatomy and then in the follow-up article discuss some of the problems we see in our boars.

Thankfully our animals are generally fairly easy to sex even at a young age (although almost all of us have missed the mark on some!). Typically in prepubescent animals we look for either an “i” which is a boar, or a “Y” which is a sow. In older boars the presence of two testes within the scrotal sac or pouch makes identification of boars very easy.

The scrotal pouch houses the testes. The most interesting fact is that the inguinal ring- which is the communication between the peritoneal cavity and the scrotum- remains open throughout the life of the boar. In cadaver specimens, the testes are easily pulled back into the abdomen through the ring.

The scrotal pouch itself has a perineal sac which is a large flat sac that extends from the anus forward to the external urethral orifice. This sac has two perineal glands, one either side of the midline and multiple fine hairs. Often there is a lot of debris in this sac. We will discuss this next issue. The sow also has a perineal sac but it is just a shallow cleft in front of the anus.

The penis of the boar normally is covered by the prepuce and is retracted within this sheath of skin when in a non- aroused state. The penis is S-shaped and in cadaver specimens, I have never been able to fully catheterize a boar (which makes urinary obstruction carry an even more ominous prognosis). When the penis is extruded, minute saw like scales or spurs cover the surface of the glans. The glans itself has a unique feature called the intromittent sac which is only found in hystricomorpha and everts during erection revealing two “styles” which are made of keratin and are 3-5 mm in length. Some experts feel these styles must be present for successful copulation while others feel their presence has an unknown function (including no function at all). Boars also have an os penis which probably represents an ossified cranial portion of the corpus cavernosa. The only reason to include this little factoid here is to suggest that this probably limits the size of a stone that a boar can successfully pass. In my experience, sows can pass stones up to 4-5 mm and boars about 1.5 mm stones. That is NOT to say that they WILL do this, just that it is anatomically possible.

In terms of accessory sex glands, the cavy had a prostate, seminal vesicles and accessory glands and bulbourethral glands. In addition, boars possess paired coagulating glands. Of these, the

accessory glands are the largest, often reaching lengths of 10 cm. The secretion of the coagulation glands coagulates the fluid of the seminal vesicles in the ejaculate which makes the vaginal plug.

This covers the anatomy that we need to know to discuss some problems experienced by boars in our next installment.

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