

PICTURES OF GONADS

(fig 1)



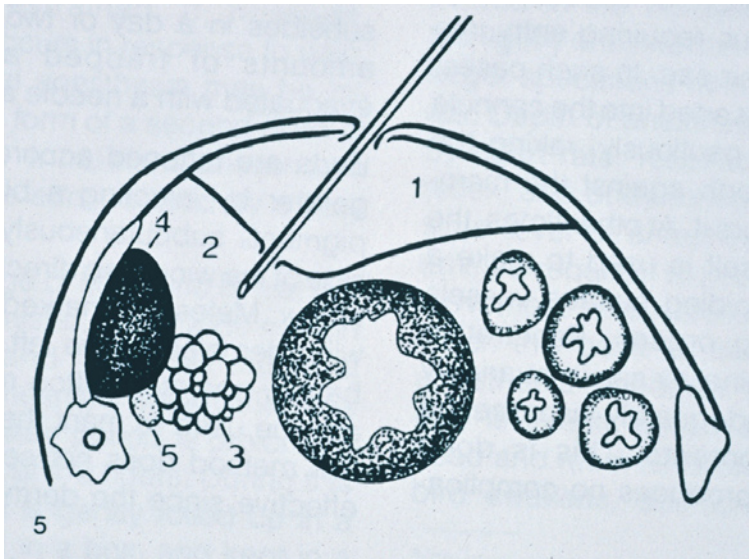
After the entry site is surgically prepared, the skin is incised and the trocar-cannula device carefully inserted into the abdominal cavity.

(fig 2)



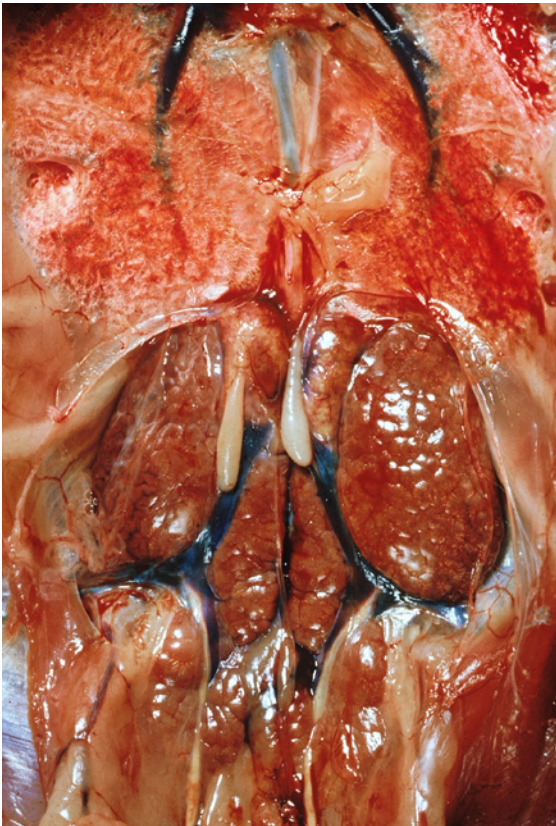
The trocar is removed and the endoscope is inserted through the cannula. The veterinarian positions the endoscope so that the gonad (sex organ) can be clearly visualized

(fig 3)



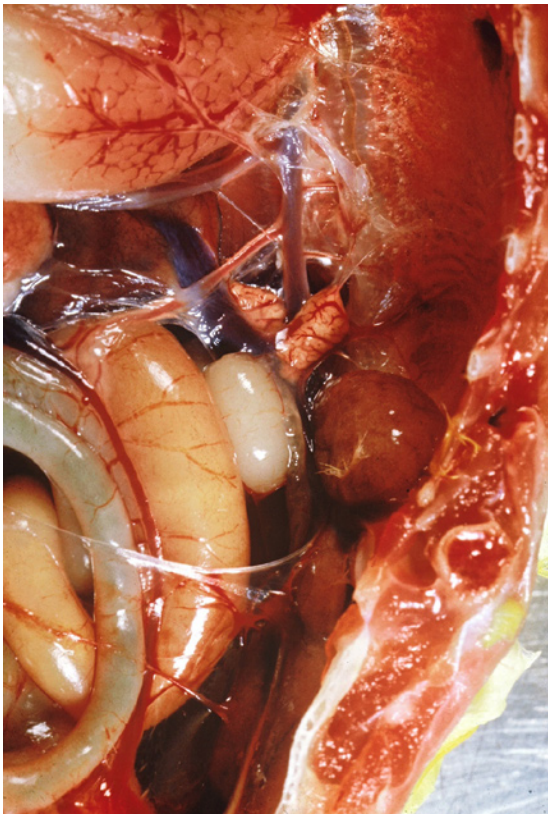
Transverse section of a bird's abdomen showing the air sac membrane that must be punctured to allow visualization of the gonad with an endoscope. Abdominal air sac (1), Intestinal peritoneal cavity (2), ovary (3), kidney (4), adrenal gland (5). The large organ in the middle of the abdomen is the proventriculus (stomach). Intestines and sternum are to the right, spine is to the left.

(fig 4)



The testes from an immature male are very small and usually avascular. These are cream colored and cylindrical in shape. In this picture the breast muscle and sternum, liver, heart, and gastrointestinal tract have been removed. The testes are located against the dorsal body wall atop the larger adrenal gland. The reddish-brown kidneys are located to either side and the pink tissue at the top is lung.

(fig 5)



Mature left testicle as seen from a left flank approach. It is white in color and oblong in shape. Intestines are found to the left. The adrenal gland is located just above the testicle and the anterior pole of the left kidney is to the right. These three organs form the triad that should always be identified when sexing birds.

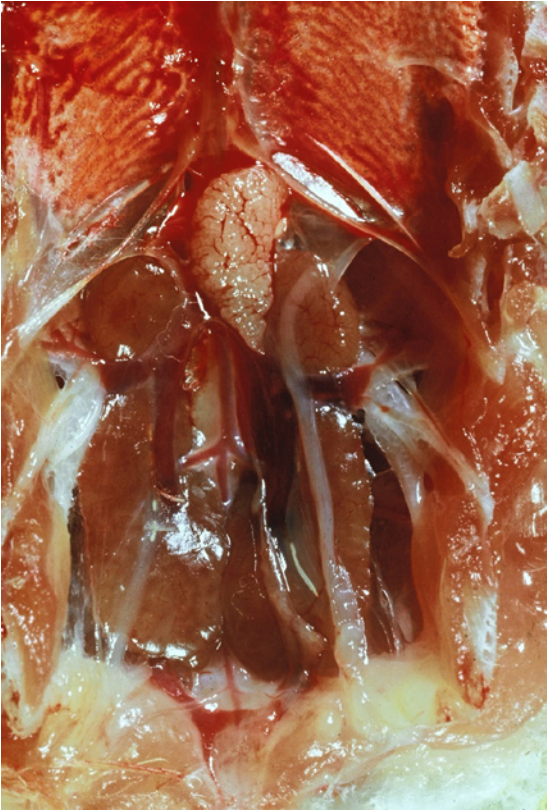
In most birds the testes are creamy white or yellow in color. However in some parrots (i.e. cockatoos and many of the Australian parakeet species) they appear melanistic (greenish black) in color. The testes can vary in size depending on the age of the bird and the stage of the reproductive cycle. During the breeding season they can greatly enlarge and become very vascular on their surface. The testes atrophy after a period of active sexual stimulation; however, they never become as small as they were in the prenuptial stage.

(fig 6)



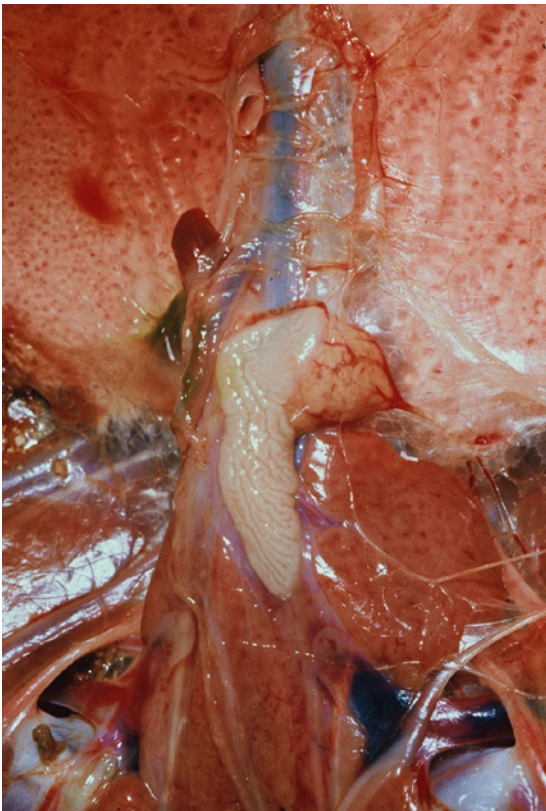
The ovary of a mature bird has a grape-like cluster of small, but prominent follicles that are easy to identify. There is only one ovary in a bird. Like the testes, the ovary is usually creamy-white in color but may be partially or totally pigmented.

(fig 7)



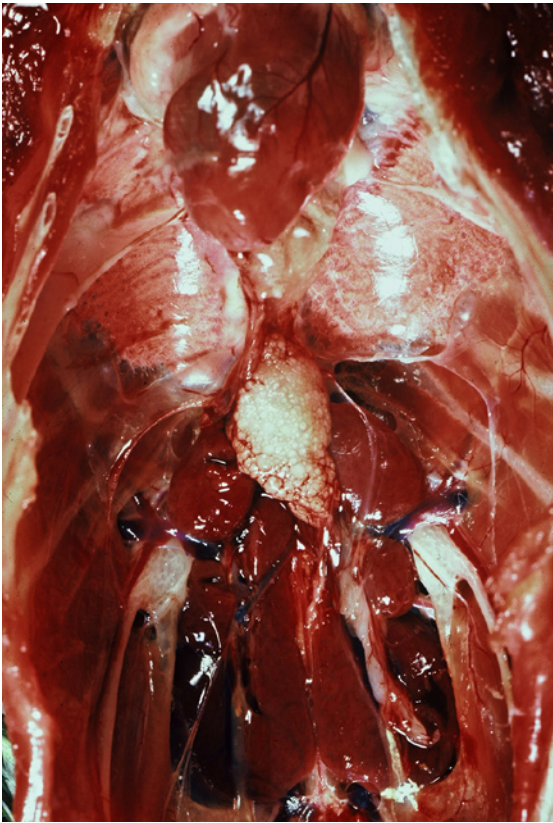
In the ovary of a very young immature bird, follicles are not present, which can make differentiation between it and a testicle difficult. Such an ovary is flattened and may resemble fat (fig 7). Note the underdeveloped oviduct which appears as a small, straight white tube coursing from the ovary toward the cloaca.

(fig 8)



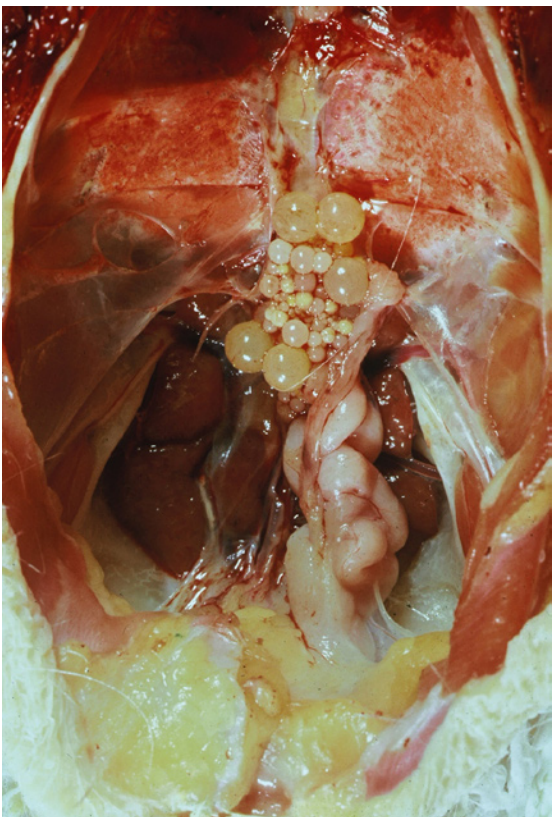
An immature ovary may also contain multiple sulci and seem “brain-like” in appearance (fig 8).

(fig 9)



The ovary of an older immature female has a fine granular surface which resembles cobblestone. This is consistent with very early follicular development.

(fig 10)



Mature ovary with well-developed yolk-filled follicles. Such an ovary would be described as mature and sexually active. Note the enlarged, convoluted oviduct caudally. After sexual activity, the ovary goes into a resting phase where it again becomes diminutive. Such an ovary is then described as being mature but sexually inactive (fig 6).