
On the anatomy of the breast, by Sir Astley
Paston Cooper, 1840

Rare Medical Books

1840

On the anatomy of the breast - Plate VIII: Of the mammary gland of the bitch

Sir Astley Paston Cooper , Bart.

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J. Graf. Printer to the Queen.

PL. VIII



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John Holt, del. et lithog.

PLATE VIII.

Of the Mammary Gland of the Bitch.

Fig. 1, gives a view of the general form and structure of the mammary glands in the bitch.

Divided into pubic, abdominal, and pectoral portions.

The number of teats in this subject was ten.

The epigastric arteries send branches into the gland at its pubic portion. The axillary artery at its pectoral, and the internal mammary at the posterior or abdominal end of the sternum to its middle portion.

Fig. 2. The duct and glandules of one gland injected.

Fig. 3. A duct with some of its glandules and cells injected.

Some arborescent vessels were also injected.

Fig. 4. A portion of the gland injected by the ducts with mercury, and the milk-cells are filled, and very minutely injected near the centre of the preparation.

Figs. 5 and 6, Exhibit injected milk-cells magnified twenty times.

Having succeeded in procuring the milk of a pointer bitch a few days after she had pupped, I sent a bottle of it to Dr. Golding Bird, who had the kindness to analyze it, and the following is his letter, for which I feel greatly obliged.

“ *Dec. 28, 1839.*

“ My dear Sir Astley,

“ Anxious not to keep you waiting for an account of the chemical properties of the specimen of bitch's milk you favoured me with, I devoted a few hours yesterday to its examination.

“ A bottle capable of containing 54·1 grains of water, held 55·4 grains of the milk; its specific gravity, consequently, was 1·024.

“ By repose, a quantity of viscid cream separated, forming in the specimen you sent me, about one-sixth of the bulk of the whole.

“ Carefully evaporated in a salt-bath, twenty-five grains left six grains of a yellowish greasy residue. This, when repeatedly boiled in strong alcohol, left 4·2 grains of matter insoluble in that menstruum; this residue consisted chiefly of curd, resembling in its physical and chemical properties the caseous matter of cow’s milk; by incineration it left 0·25 grains of saline matter, consisting chiefly of the earthy phosphates.

“ Not to weary you by a detail of the remaining steps of the examination, I content myself with subjoining the result of the analysis, calculated for 100 grains.

Butter, containing some common salt and sugar of milk	7·2
Caseous matter	15·8
Earthy saline matter, chiefly phosphate of lime	1·0
Water and volatile matter	76·0
	<hr/>
	100·0

“ From this examination it appears that the milk of the bitch differs from that of the cow, ass, and human female, rather in the different proportion in which its ingredients exist, than in any other particular.

“ I remain, dear Sir Astley,

‘ Your’s very faithfully,

“ GOLDING BIRD.”

“*Wilmington Square.*”
