1840

On the anatomy of the breast - Plate X: Arteries and veins

Sir Astley Paston Cooper , Bart.

PL. X.

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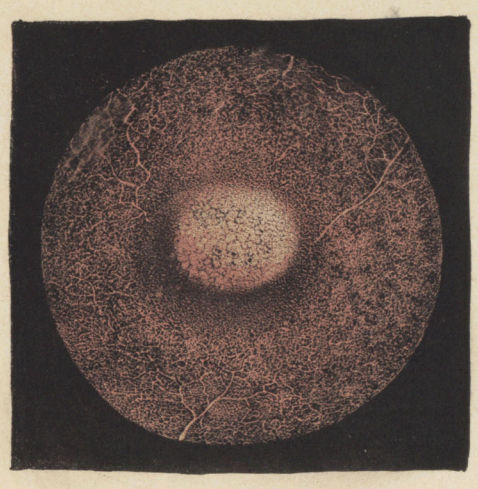

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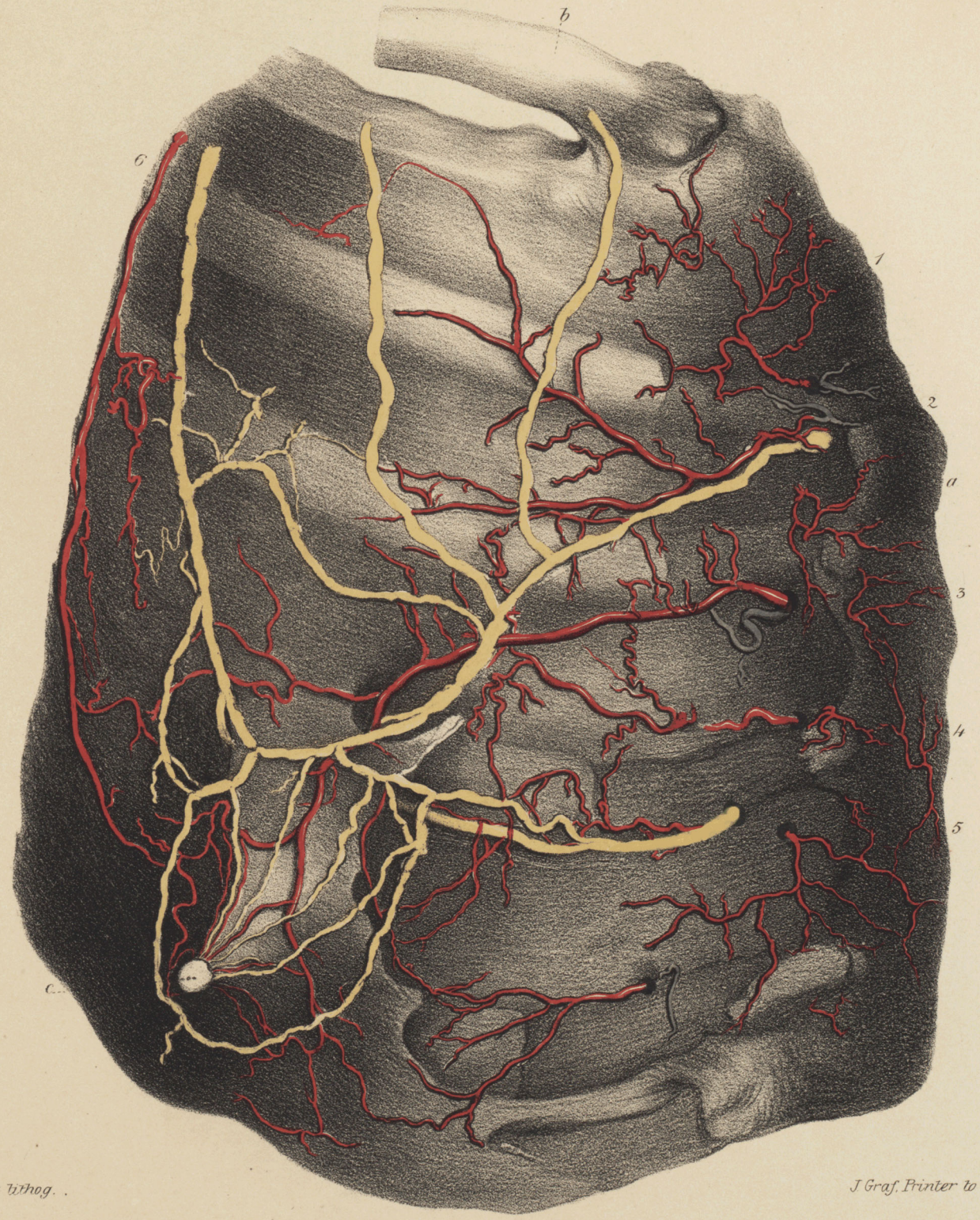

G. Childs del. et lithog. .

J Graf, Printer to the Queen.

Plate X.

Arteries and Veins.

Fig. 1. The arteries and veins of the breast from their anterior and posterior sources.

6, The posterior or external mammary artery from the axillary or thoracica longa, sending branches over the ribs and intercostal muscles to the nipple.

1, 2, 3, 4, 5, The anterior arteries passing between the cartilages of the ribs, from the internal mammary.

The posterior artery, 6, and the third, fourth, and fifth anterior, may be seen to send branches to the nipple, *c*, and to the breast. A posterior mammary vein accompanies the artery, 6. An anterior vein accompanies an anterior artery, 2, and another vein accompanying artery 5, enters the chest between the cartilages of the ribs. The veins form a circle around the nipple, and radiated branches are seen terminating in that circle.

A vein is also seen ascending over *b*, the clavicle, and another vein passing to the subclavian above the first rib. *a*, denotes the sternum, *b*, the clavicle, *c*, the nipple.

Fig. 2. Shows a more minute distribution of the arteries upon the breast and around the nipple.

Fig. 3. Vein injected around the nipple. (From a dried preparation.) Radiated branches proceed from the circle to the nipple, where they divide with excessive minuteness, receiving the blood from the papillæ.

Fig. 4. A beautiful preparation of the veins injected in the areola and nipple, showing the capillary branches of the veins in the

papillæ, and exhibiting the erectile tissue of these vessels corresponding with that which exists in the arteries as seen in *Plate* 2, fig. 14, showing that the erectile tissue is composed (as I have said,) merely of minute branches of arteries terminating in minute branches of veins, which latter cannot convey away the blood so fast as the force of the heart and arteries propels it on their side.

The arteries are arborescent, the veins form a net-work.

Thus I have seen in the artery and vein of the tail of the tadpole, a pulsating aorta propelling the blood into the vena cava, by various streams; but upon dividing all the arteries but one, the vena cava began to pulsate, proving that the return of the blood in the vein was effected by the pulsation of the heart and artery: so that, (as I have mentioned,) as soon as one stream only is produced, a vein becomes an artery as to the motion of its blood.
