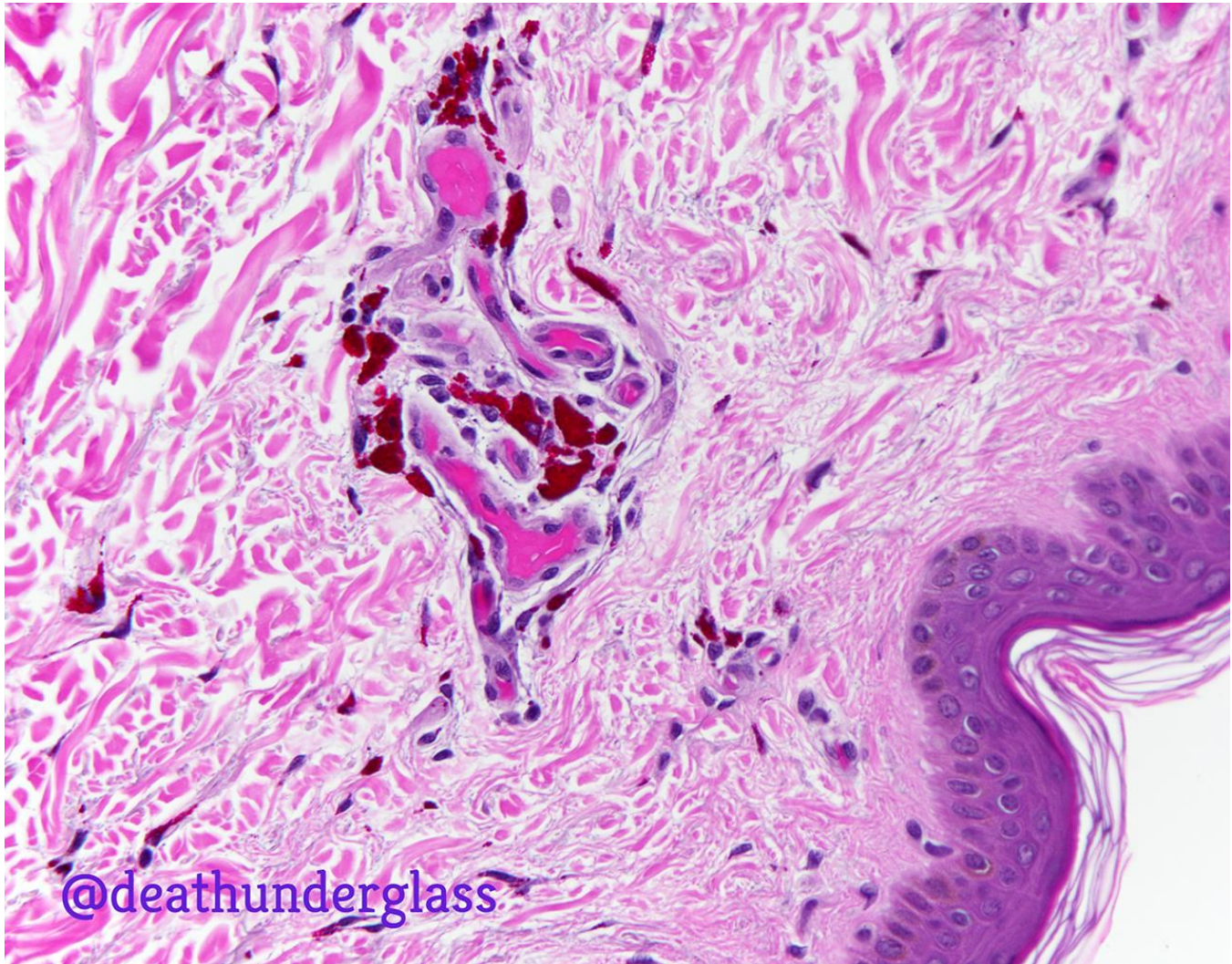


Red Tattoo



BACKGROUND INFORMATION

Tattoos are permanent designs made by inserting special pigments, such as tattoo inks, into a person's skin. Modern tattoo artists usually use machines with fine needles to inject tiny ink particles deep into the skin. The ink particles end up in the dermis, the layer of tissue beneath the outer layer of skin (epidermis). These particles typically stay in the dermis for life. A tattoo can be removed by using lasers to break down the particles.

The image shows a section of human skin with a red tattoo, magnified under a microscope. Dark red particles of tattoo ink, which can be seen in the top center of the image, are inside cells in the dermis. Cell nuclei appear as dark blue spots, and blood vessels appear as solid regions of bright pink. The epidermis is the dark purple region in the bottom-right corner of the image. The long stringy structures by the epidermis are keratin, the protein that makes skin waterproof.

Technical Details:

A section of human skin with a tattoo was stained in purple and pink with hematoxylin and eosin. The skin was then photographed using a light microscope at 400x magnification.