

Lower Abdominal Tissue: DIEP and SIEA

The **Deep Inferior Epigastric Perforator (DIEP)** flap uses the skin and fat from your lower abdomen to reconstruct your breast. In order to successfully transfer enough fat and skin to recreate your breasts, the tissues (often referred to as a “flap”) need to include an artery that brings blood, oxygen and nutrients to the tissues as well as a vein that takes away the deoxygenated blood. The DIEP flap uses vessels named the deep inferior epigastric artery and vein. This vessel travels in the rectus muscles, which are the vertical muscles in your abdomen that create the “six-pack”.

We then use state-of-the-art techniques to meticulously dissect the blood vessels free from the muscle. This enables us to harvest only the skin, fat and blood vessels, while leaving the rectus muscle in its place in the abdomen. This advanced reconstruction is sometimes referred to as a “perforator flap”, because it only takes the blood vessels as they come through the muscle and leaves the muscle in place.

We then transfer the tissues to the chest where we shape it into your new breast, after we reconnect the blood vessels to vessels in the chest using a microscope. The area in your abdomen where the tissues were taken is then closed in a manner similar to an abdominoplasty (“tummy-tuck”). The DIEP flap can give you natural, soft, reconstructed breasts with the added benefit of flattening the abdomen. Since your new breasts are completely made of your own tissues, they will change with your body through time.

The **Superficial Inferior Epigastric Artery (SIEA)** flap uses the same tissues as the DIEP flap. The difference is in the artery and vein that we use for the flap. The superficial inferior epigastric artery and vein runs through the fat under the skin and does not go through any muscle. However, only approximately 30% of women have an SIEA due to natural variations in anatomy. When it is present, it gives us the ability to reconstruct the breasts without disturbing the muscles at all. The tissues are used in the same manner as the DIEP in terms of creating the breasts. The abdomen is closed in the manner of an abdominoplasty as well.