

Selecting Scissors

Video Transcript

In addition to main families, scissors are classified according to a number of other differentiating characteristics. Features such as straight shanks, curved shanks, or serrated edges greatly impact the suitability of the instrument for cutting and dissection purposes. In this video, we will explore a range of scissor variations and the surgical applications for which they are best suited.

Curved scissors are often chosen when the tissues need to be cut in a smooth curve. Another advantage of scissors with curved blades is that they offer 30–40 degrees more directional mobility than straight scissors. When working in remote recesses where horizontal cutting is needed, curved scissors also allow for better visibility of the tissues being cut, when compared to straight scissors.

Straight scissors provide better mechanical advantage, making them superior to curved scissors for cutting tough tissue. In addition, straight scissors can provide a more precise straight cut compared to their curved counterparts. These characteristics explain the common practice of using straight, stout, Mayo scissors to open the tough linea alba in midline abdominal approaches, where it is important to avoid straying paramedian into the rectus muscles.

Blunt-tipped scissors are favored over sharp-tipped scissors in situations where dissection is being performed around important structures. The advantage of the blunt tip is that it is less likely to get caught in tissue. Additionally, blunt-tipped scissors separate tissue without damaging nearby neurovascular structures, especially when probing or bluntly separating connective tissue layers.

Some scissors possess a serrated edge. These edges have fine notches, like teeth on a metal saw, which help prevent tissue from slipping out of the blades. Serrated scissors are useful for cutting slippery tissue, or for firm, tough tissue such as the ear canal, which tends to slide out of the blades during scissor cuts. Plastic surgeons often choose serrated curved scissors in order to create accurate and conforming skin incisions.

Some scissors, like the Super Cut™, Microsharp, and SureCut scissors, possess specialized blade edges. These scissors have uniquely ground edges where one edge has microserrations and the opposing edge is honed sharp. This combination ensures precise, fine, and non-crushing cuts that minimize trauma. The Super Cut™ patterns also cut efficiently when used in most angles without changing hands or turning the scissors over. Keep in mind that although Super Cut™ scissors cut soft tissues very well, they dull easily, especially when used to cut tough tissue or sutures. Metzenbaum, Mayo, and iris scissors are all usually supplied with Super Cut™ blades. Super Cut™ scissors are readily identified by their black ring handles.

Some scissors have tungsten carbide inserts on the blade edges. Carbide is a very hard metal that maintains a sharp edge much longer than stainless steel, reducing the frequency of sharpening. However, unlike carbide tipped needle holders, the carbide inserts in scissors cannot be replaced. Carbide-tipped scissors are readily identified by their gold ring handles.