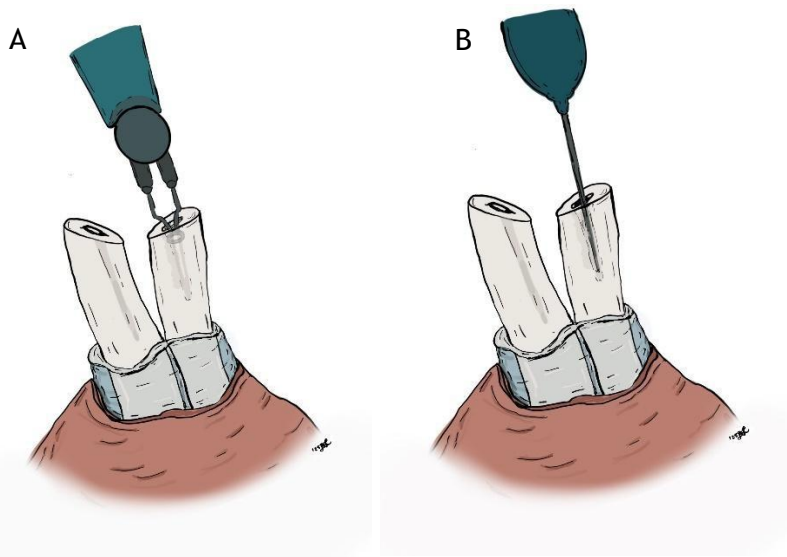


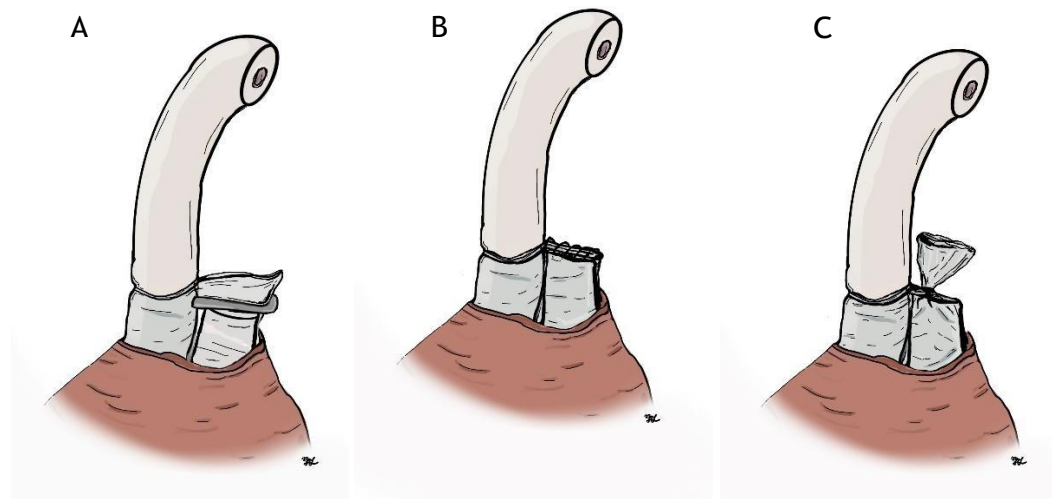
Figure 3A-B. Mucosal Cautery\*



**Mucosal cautery (MC)** is the technique of applying thermal (A) or electrical cautery (B) to the mucosa of the cut ends of the vas to destroy the vasal mucosa while avoiding or minimizing damage to muscle layers. The goal of MC is to create a plug of scar tissue that occludes the vas lumen. The length of the cauterized segment varies from a few mm to 1.5 cm. MC may be combined with excision of a vas segment, folding back, or FI. Cauterizing the mucosa while simultaneously limiting cautery damage to the muscular layer of the vas prevents sloughing of the cauterized portion of the vas that could occur if its full thickness was destroyed by cautery. Both electrical (monopolar) cautery and thermal cautery, usually provided by a battery-powered hand-held device, can be used for MC. There is a small risk of full thickness necrosis of the vas with electrical cautery, which is best avoided as the goal of MC is to keep the wall of the vas intact and effect obstruction of the vasal lumen.

\*Illustrations provided by Divya Lagiseti

Figure 4A-C. Fascial Interposition\*

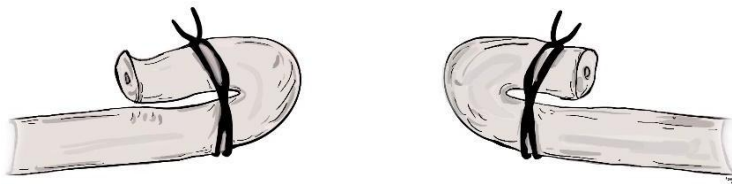


**Fascial interposition (FI)** is the technique of placing a layer of the vasal sheath between the two divided ends of the vas. The sheath is closed over the testicular or abdominal end using a metal clip (A), a suture placed with a tapered needle (B), or a free tie (C).

FI is often combined with other techniques such as ligation of the vas and excision or MC of the vasal lumen. When **open-ended vasectomy** is performed, (leaving the testicular end of the divided vas non-occluded), FI is critical to prevent recanalization.

\*Illustrations provided by Divya Lagiseti

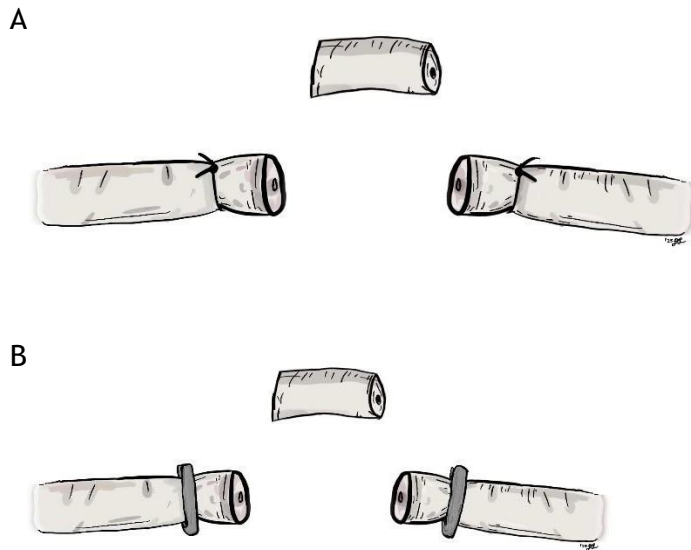
Figure 5. Folding Back\*



**Folding back** (“doubling”) is the technique of folding and suturing/ligating one or both divided vasal end(s) back onto itself to prevent the two cut ends from facing each other.

\*Illustrations provided by Divya Lagiseti

Figure 6A-B. Ligation and Excision\*



**Ligation** refers to occlusion of the vas with suture material (A) or titanium clips (B) with division of the vas between the occluded points. The number of clips or sutures placed on each end of the divided vas is usually one or two but maybe more. Ligation of the vas is commonly accompanied by **excision** of a 0.5-1 cm segment of vas deferens, although some surgeons routinely remove a longer segment of vas deferens during the procedure.

\*Illustrations provided by Divya Lagiseti