

Ensuring Carpal Tunnel Release: “Drop in”, “Rail Road” or “the Open Door” Sign

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Dear Editor,

Carpal tunnel syndrome is one of the most common problems faced by people worldwide. It remains a concern for the developed world; although many treatment modalities are available, endoscopic release of the tight compartment is one such treatment modality (1, 2). As in all surgical fields, minimally invasive procedures are preferred over open surgical procedures wherever possible (3). Endoscopic procedures have a steep learning curve and they are much easier for those who have already mastered open procedures.

However, the changing trend in orthopaedics has seen many young surgeons opting to focus on minimally invasive procedures (4). They thus need proper training, guidance, and confidence building regarding such procedures.

The “rail road” sign and the “drop in” sign mentioned in one of the research articles are examples of the measures that surgeons around the world should be aware of (5). A good representative diagram makes mastering surgical techniques much easier.

My personal experience with minimally invasive procedures is the same. When the flexor retinaculum is released, the two cut ends fall apart and the associated distance gives the wound a “rail road” appearance. The medial nerve can be freed from any adherent structure and mobilised to confirm the total release of the flexor retinaculum (6). The flexor retinaculum will only allow free passage when it is totally released, and it will fall back with the nerve (i.e., the “drop in” sign). This may result in an appearance akin to “the open door”, wherein two flaps can separate and then approximate to allow for decompression.

The sign is reproducible in open, minimally invasive, and endoscopic procedures. It can be regarded as the key sign of minimally invasive procedures, and its presence can ensure that the surgeons have completely released the carpal tunnel. The sign can also be elicited in the release of

tarsal tunnels; however, literature supporting this still has to evolve over time.

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