STELLATE GANGLION BLOCK (SGB)

Sounds scary and you may think that you will never attempt this block. Hopefully you will realize that he Emergency Medicine provider may be the best equipped to perform this procedure and it may safe a life. Let's go through the background, images, how to perform the block, and a video.

Basics of the Stellate Ganglion

Works through cardiac **sympathetic denervation** - Nerve block at the Stellate Ganglion cuts off sympathetic outflow to the myocardium. Use in refractory ventricular arrhythmias. Dramatic reduction in arrhythmia burden in case studies.

WHAT SIDE?

The **Left** Stellate Ganglion is more important in autonomic regulation of the heart. So if you have to choose, pick the one on the side of the heart. However, bilateral blockade may be most effective.

WHEN?

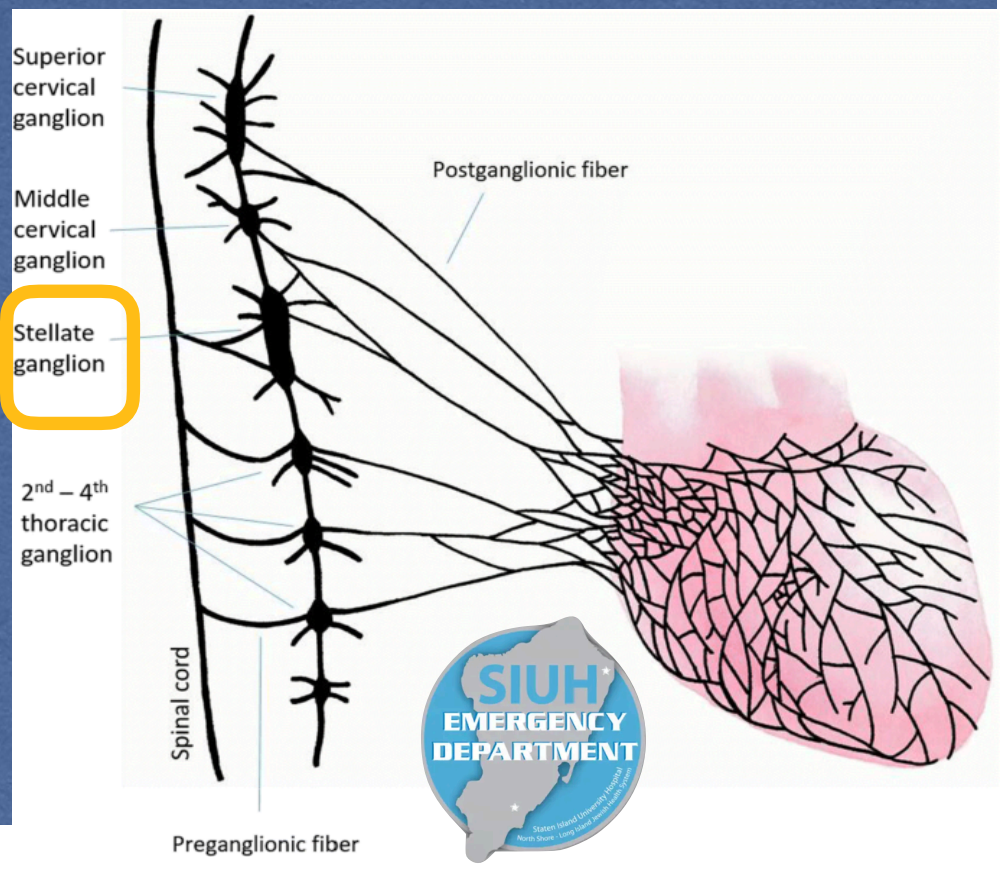
Think about using in the ED when high quality ACLS, EPI, Amiodarone, Dual sequence Defibrillation, and Esmolol are not working and your patient is in refractory V Fib.

SAFETY

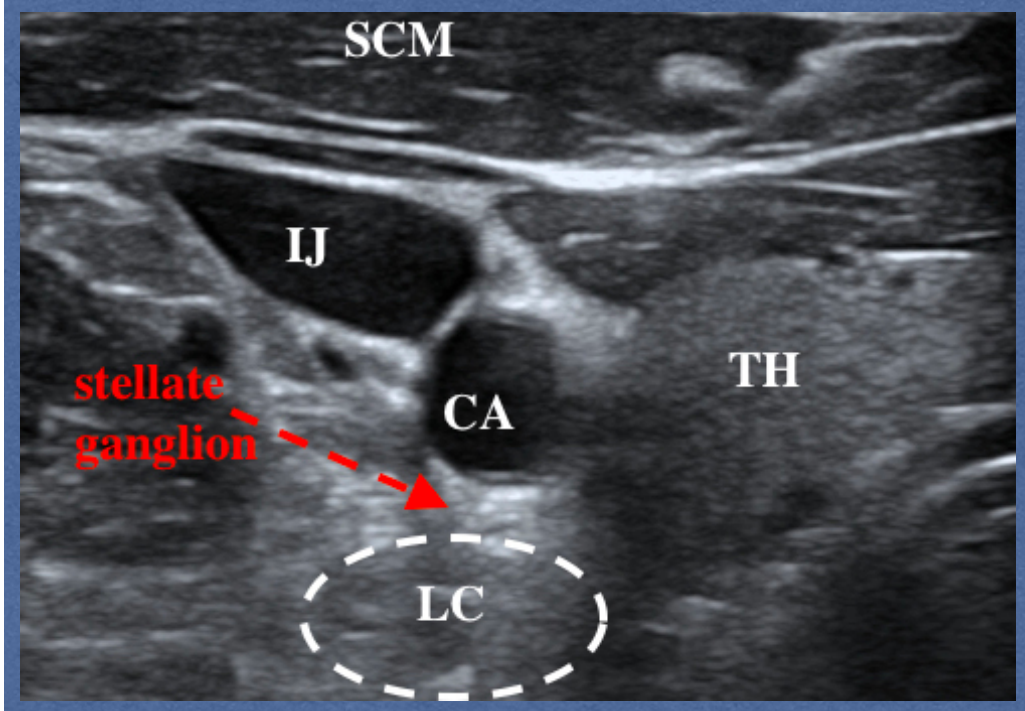
Last ditch effort in the ED. However, has been performed for over 100 years and is relatively safe.

SUPPORT

The American Heart Association and American College of Cardiology guidelines for the treatment of ventricular arrhythmias state that "the significant morbidity and limited options in these patients make cardiac sympathetic denervation a reasonable option."

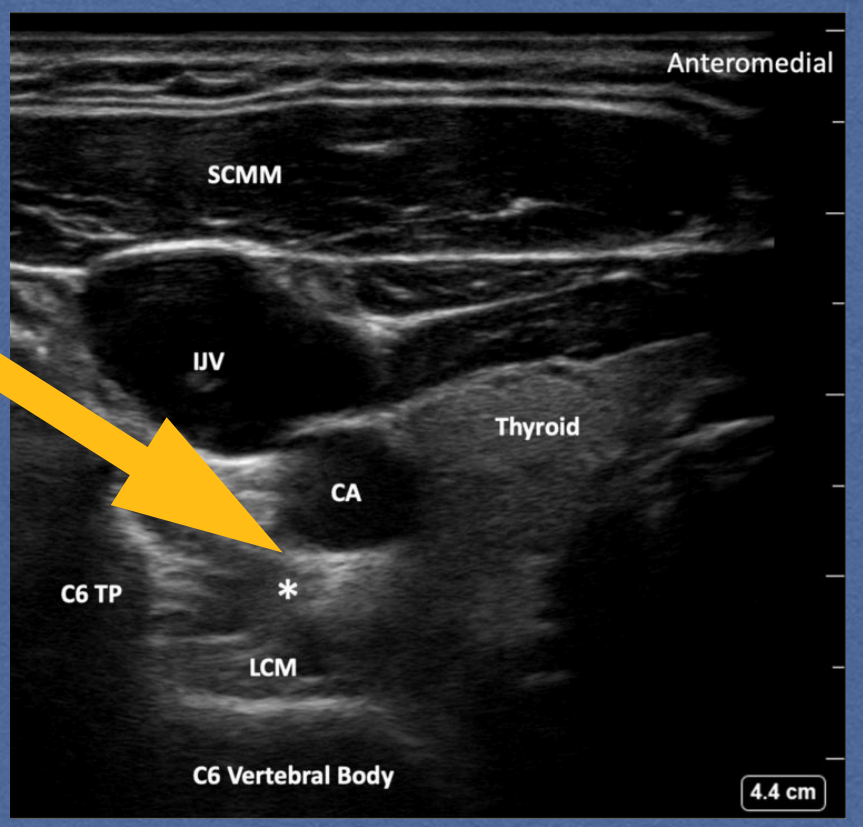


HOW TO PERFORM A STELLATE GANGLION BLOCK



This anatomy is something we look at all of the time. Find the IJ like you are placing a central line. Scan up and down until you find the largest aspect of the thyroid gland on the screen. Look for the hyperechoic circle under the Carotid

Take a **lateral approach**, going under the IJ and Carotid, and inject 8-10 mL of Lidocaine (1% or 2%) around the Stellate Ganglion.



CAPUTO'S NOTES:

Consider performing quickly during a pulse check. Yes, you can perform this in less than 10 seconds. If no success after left-side, consider bilateral block. This block should cause an ipsilateral Horner's syndrome (Pupillary constriction), which is evidence of a successful block in n/v intact patients.

SEE ULTRASOUND VIDEO ON THIS BLOCK

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