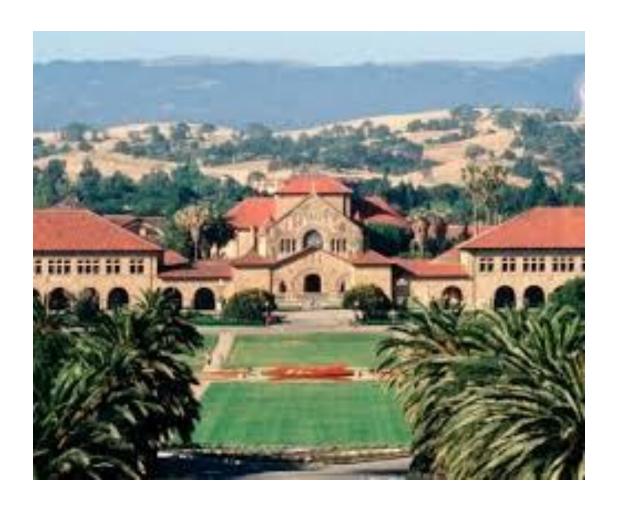
lan Carroll MD, MS IC38@Stanford.edu

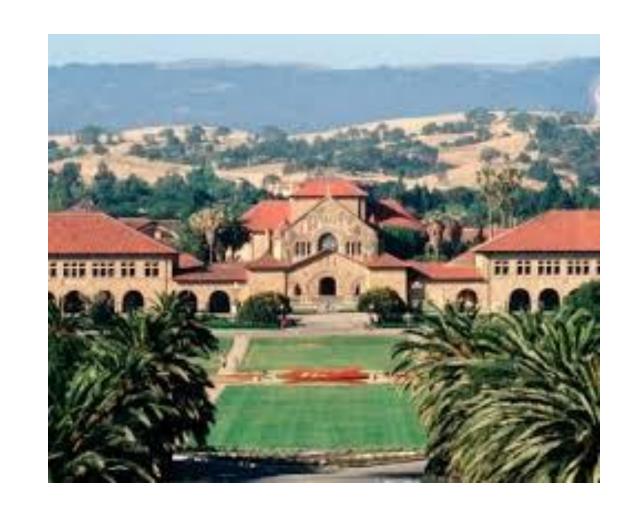
Epidural Patching:The Basics.



Disclosures

- Medical Advisory Boards
 - CSF Leak Canada
 - Spinal CSF Leak Foundation

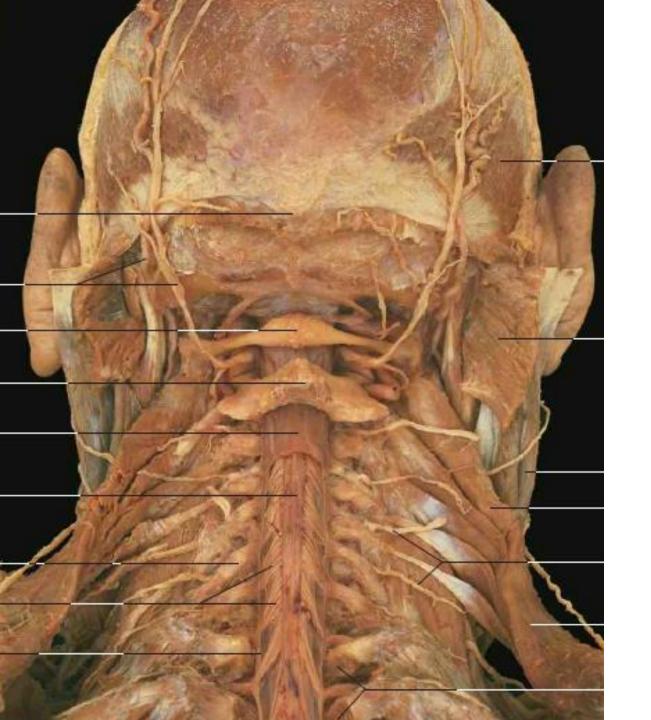
 Editorial Board-Headache

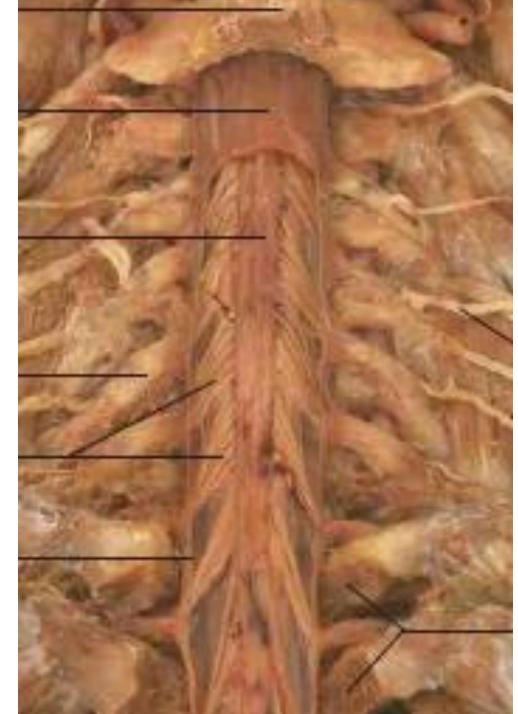


Resources for Patients and Physicians Watching

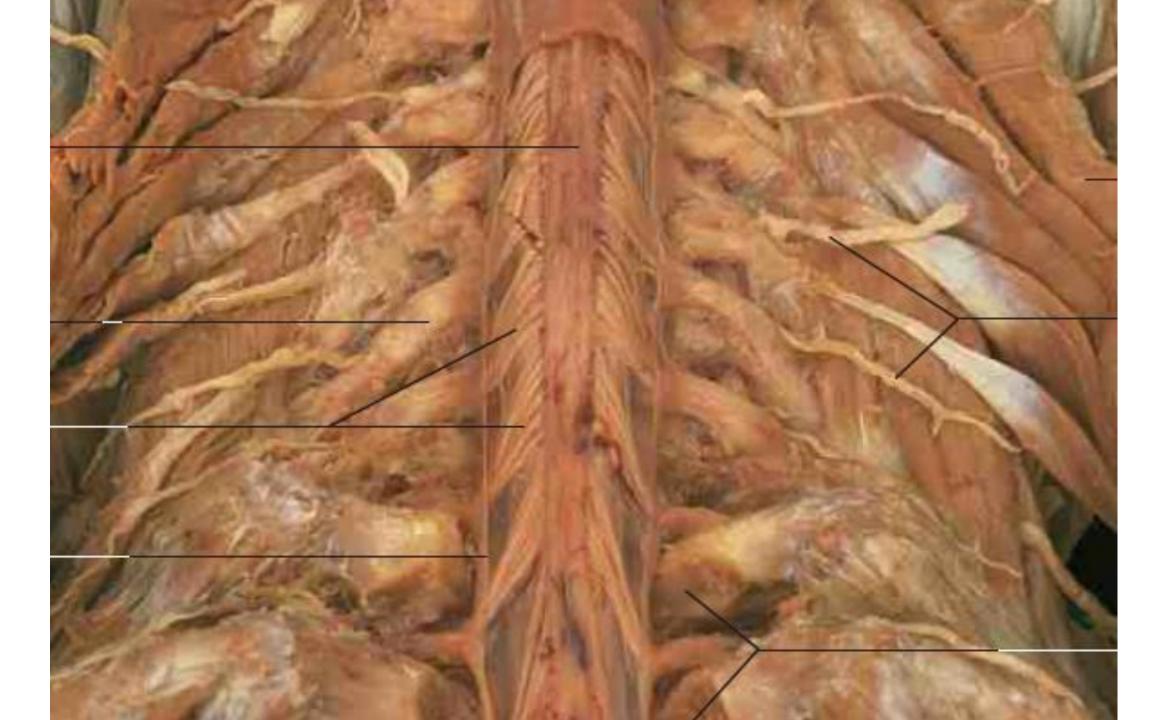


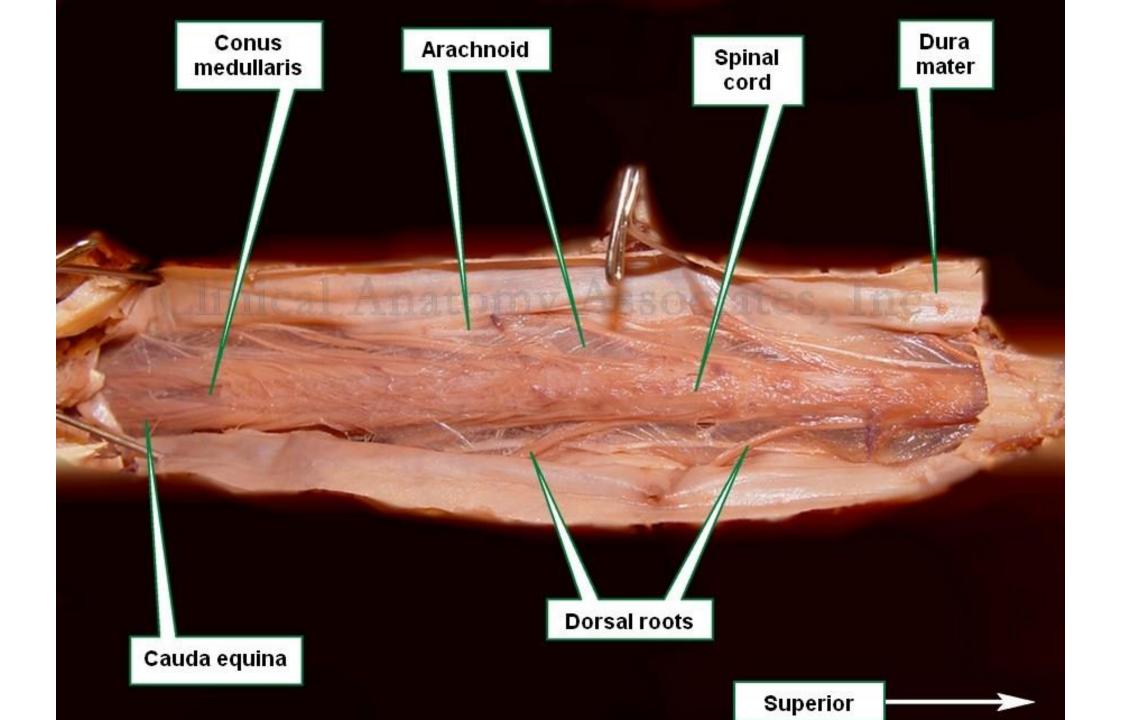
- Papers discussed in this talk
- Contact information compiled by Stanford, Duke, and others on physicians interested in helping patients with CSF Leak.
- More to come....

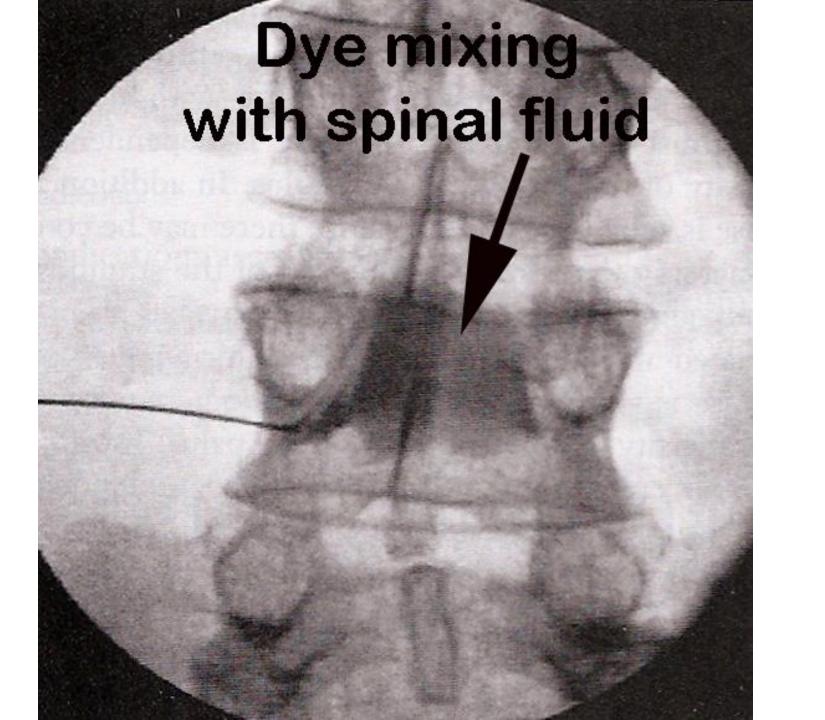












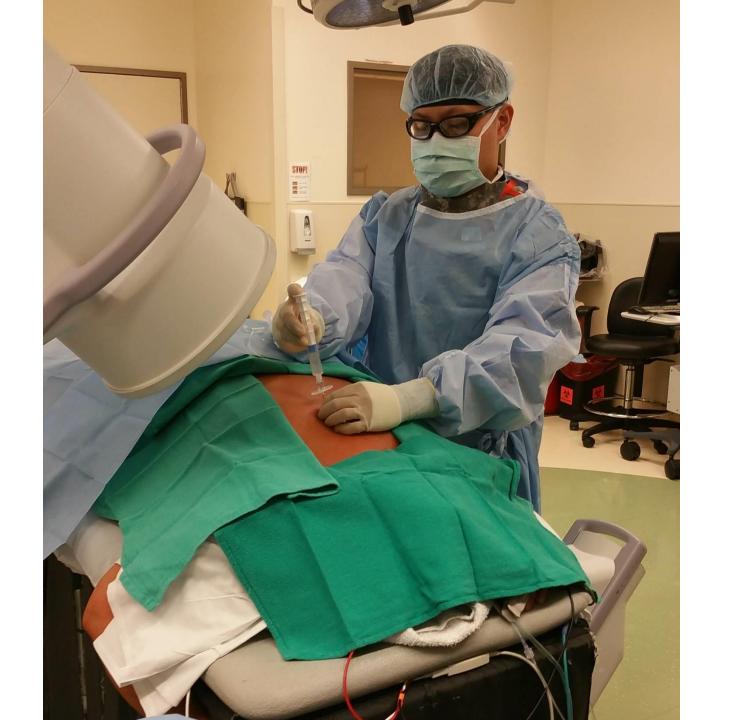
Epidural Blood Patch



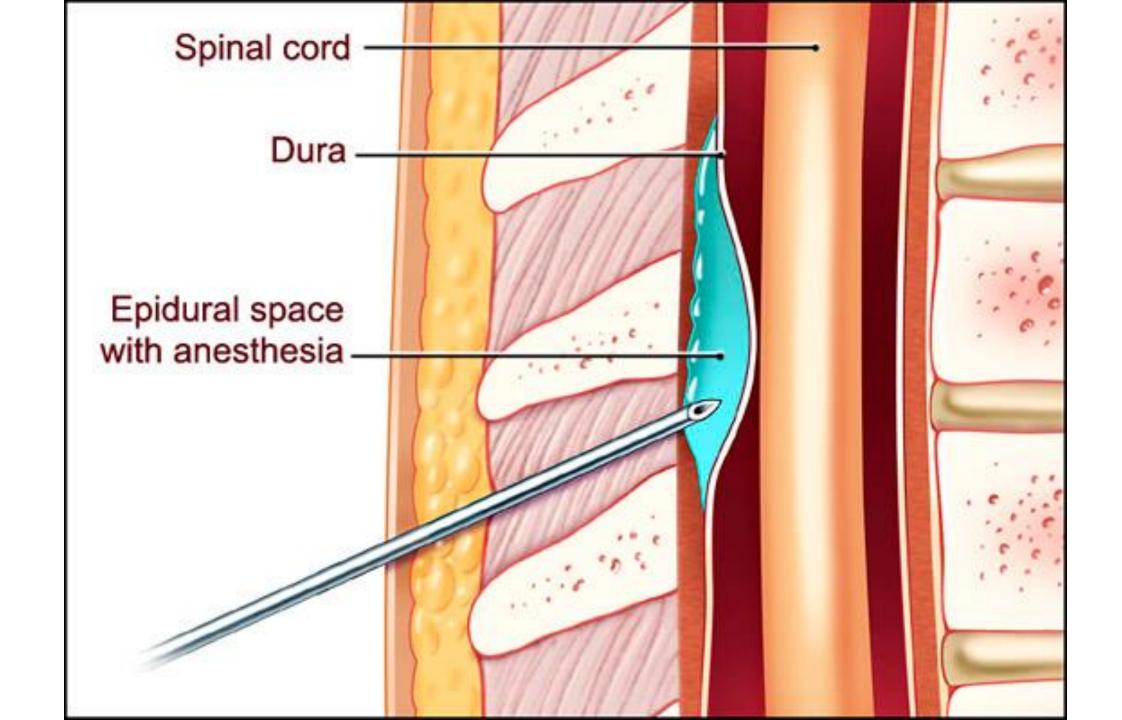


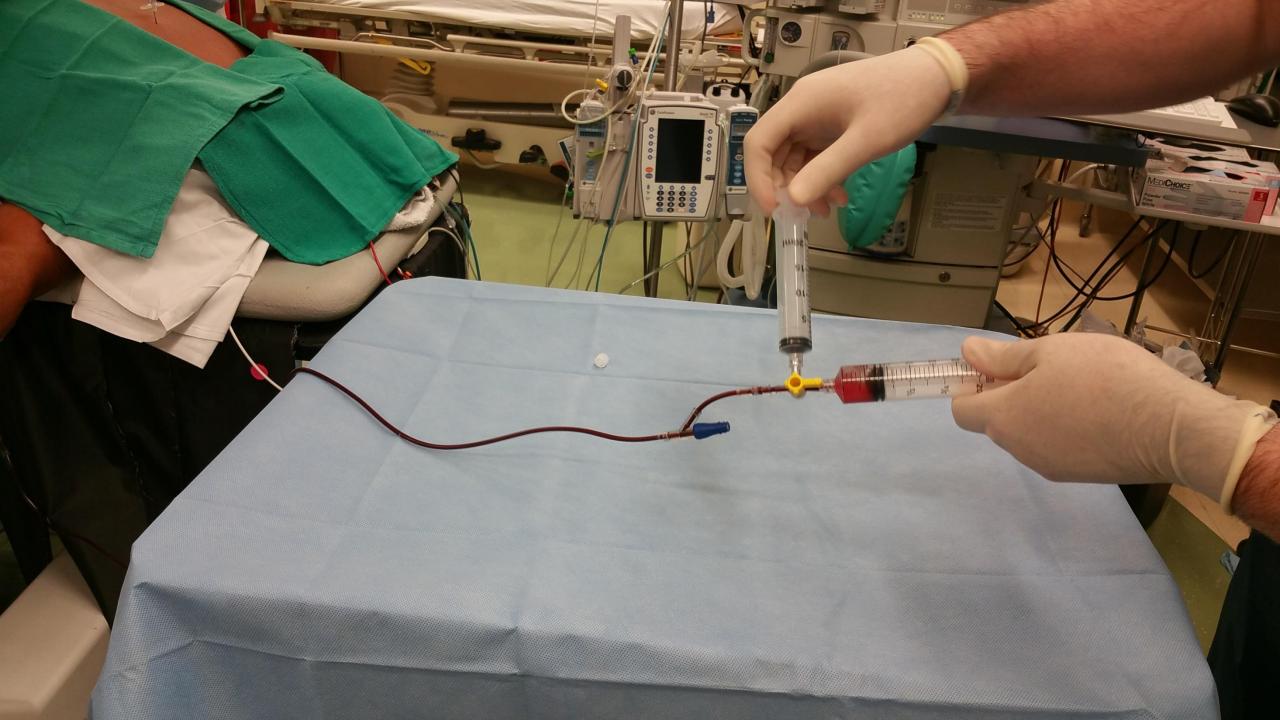


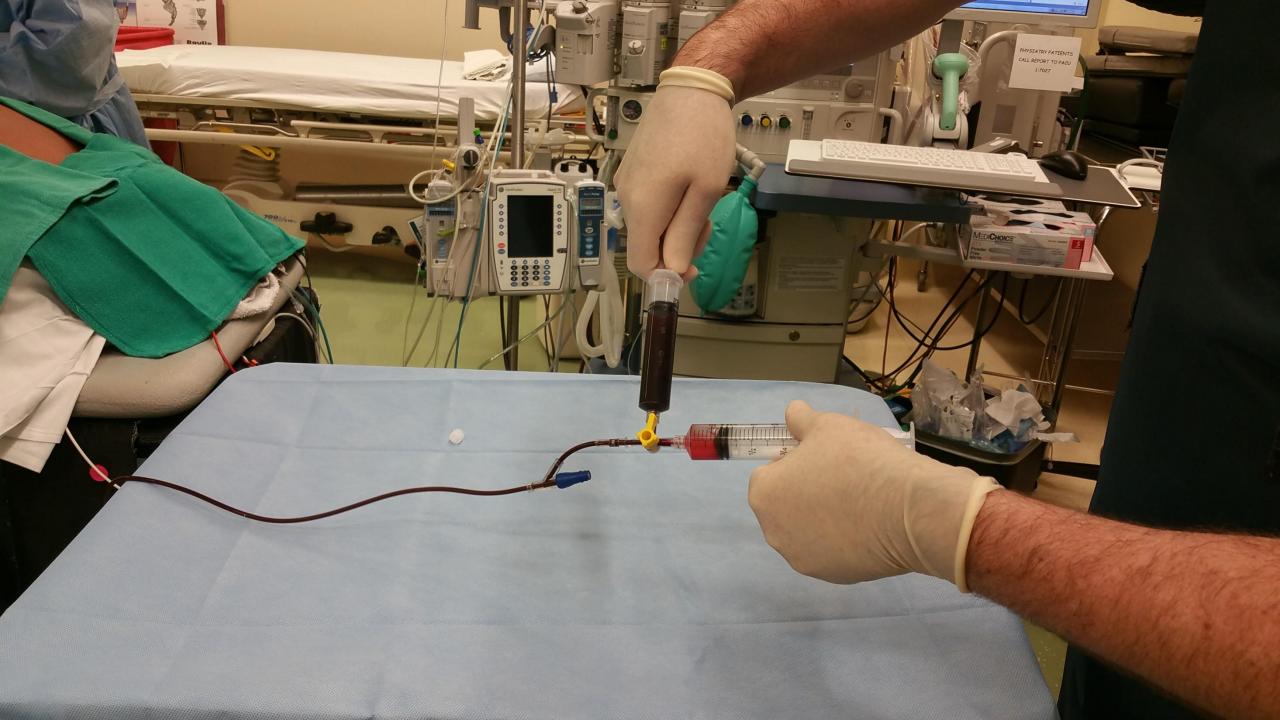






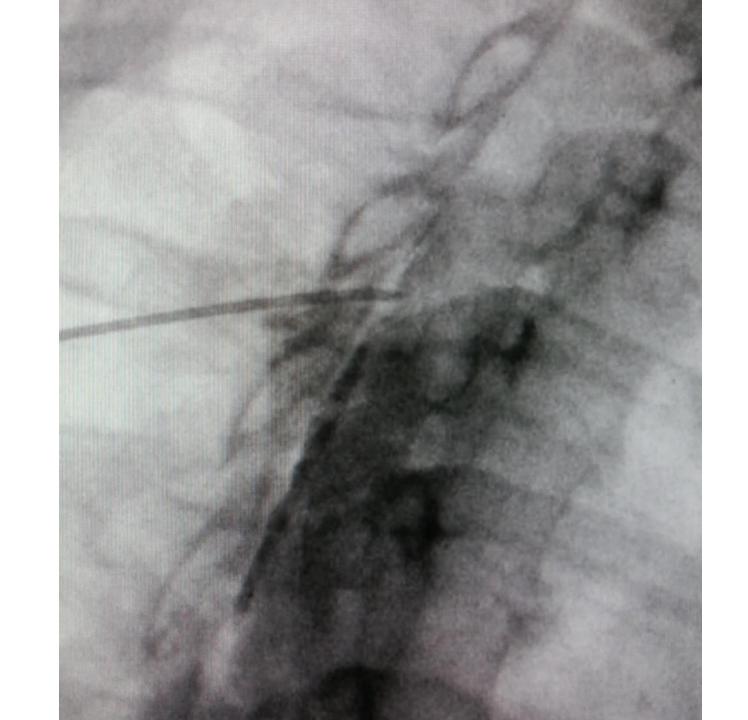


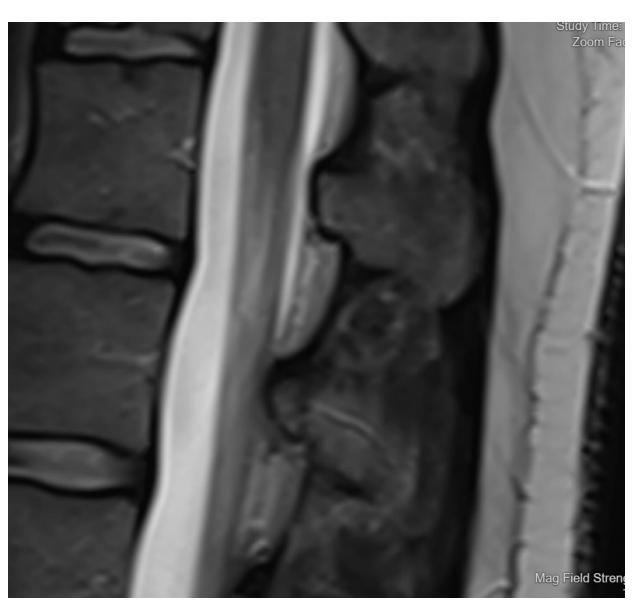


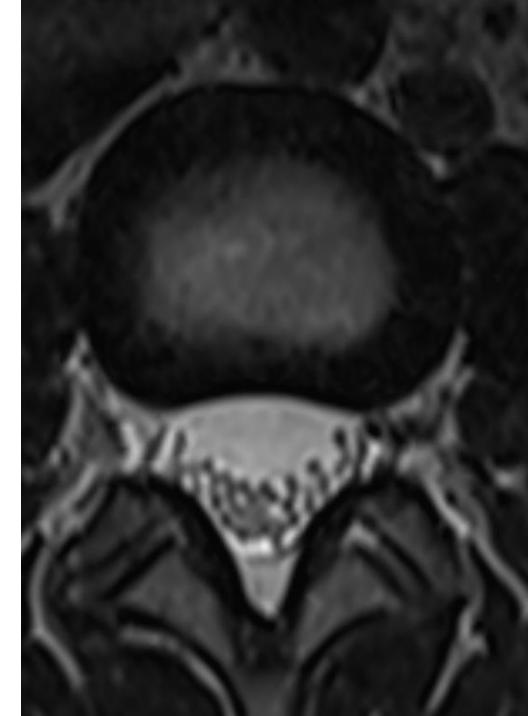






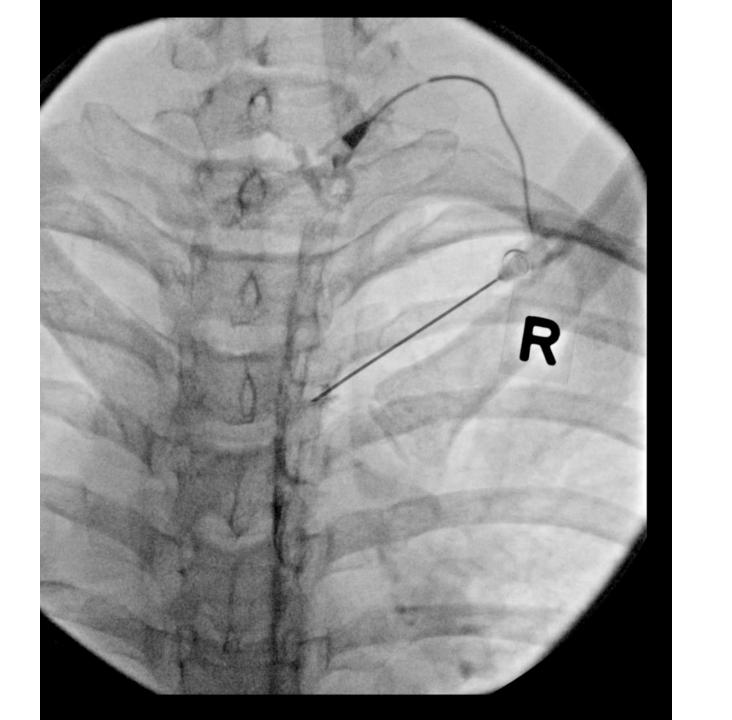














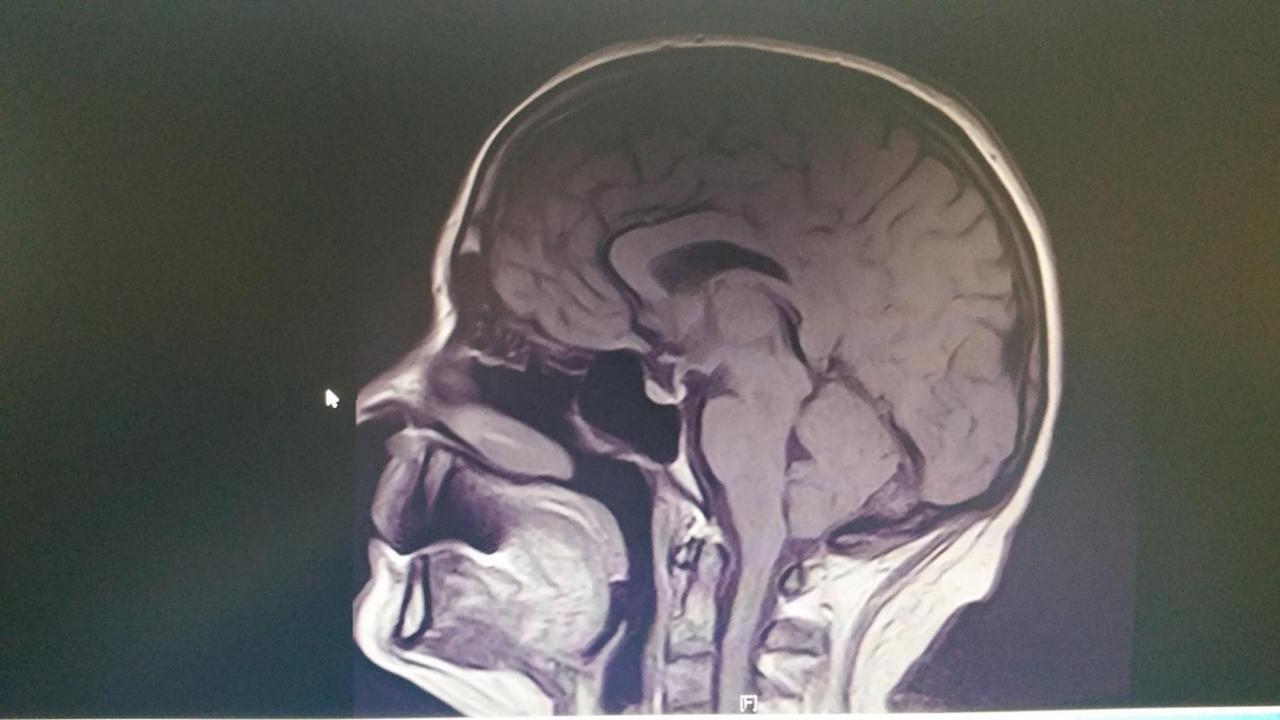




Table Precipita	ating events among 80 patien	its with spontaneous	s spinal CSF leaks	and intracranial hypotension		
	Precipitating event					
Type of event Instantaneous or <1 min			>1 min to <24 h			
Positional changes*	Picking up empty bottles					
	Picking up toiletries					
	Picking up small refrigerator					
Valsalva maneuver	Heaving/throwing heavy rock		Bench pressing			
	Extreme straining at stool		Weight-lifting			
	Extreme straining during sex		Lifting heavy crates			
	Choking due to laughing while drinking					
	Weight-lifting					
	Uncontrollable sobbing/emotional upheaval					
Minor injury	Yoga stretching		Fall during stunt work			
	Twisting back while reaching backward		Assault with neck twisting			
	Self-manipulation neck		Children walking on back			
	Hit rock while mountain biking		Yoga stretching			
			Yoga stretching			
			Yoga pulling head u	р		
			Surfing wipe-out			
			Tae-bo (kickboxing)			
				Rollercoaster ride		
			Chiropractic neck manipulation			
			Boogie-boarding accident			
			Forceful flexion hips during sex			
	Remote event					
	>24 h to <1 wk	>1 wk to $<$ 1 mo		>1 mo to <6 mo		
	Downhill skiing	Downhill skiing		Assault with neck twisting		
	Rollercoaster ride	Motor vehicle cra	sh	Bicycle crash		
	Jet skiing			Fall off treadmill		