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Anecdotes: Postoperative-Incentive-Spirometry, CSE-Introducer-Needle, Triangulated-LMA-Circuit-Support, Cuff-Pressure-Self-Deflating-Syringe, No-Injection-of-Air-Technique

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My Opinion

Everyone has their own anecdotes. The following clinical vignettes are my anecdotes. Some of them were inspired by my teachers while some of them were inspired by my students. Some of them were inspired by my kin while some of them have originated de novo. Altogether, these anecdotes seemed worth sharing with my peers and therefore, here they are.

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First anecdote:

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I have always appreciated that how wonderfully incentive spirometry has had helped my near and dear ones to increase their pulmonary capacities. Therefore, if people at homes can gain with the institution of incentive spirometry in their regular days, the patients at hospitals must definitely benefit in their postoperative pulmonary recovery with as needed institution of postoperative incentive spirometry. Although it may not be universally indicated for all postoperative patients [1-3], it may sometimes help when indicated in particular patientsâ€™ pathophysiology to ensure healthcare providersâ€™ confidence in pulmonary recovery of those particular patients back to their preoperative baselines especially when such patients are being discharged with their incentive spirometers in tow to their homes so that they can continue their pulmonary recovery at home baselines after having initiated towards it in the recovery areas inside the hospitals.

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Second anecdote:

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Spinal anesthesia needles are becoming thinner and thinner in gauge for our patientsâ€™ comfort while our patientsâ€™ intrathecal spaces are getting deeper and deeper to access during the ongoing global obesity epidemic [4-8]. Spinal spaces gain further depths when pregnancy-induced weight gains further make it difficult to impossible to palpate or locate surface markers to appropriately guide spinal anesthesia needlesâ€™ access [9-10]. Even though spinal introducer needles allow the introduction of thinner spinal anesthesia needles across them, it becomes impossible to walk-off the bony interference with thin spinal anesthesia needles especially when spinous processes, laminas, transverse processes or even pedicles are encountered at extreme depths during the spinal anesthesia needle access in obese pregnant patients. To avoid starting from the scratch by withdrawing the spinal anesthesia needles back inside the spinal introducer needles and renegotiating the spinal introducer needlesâ€™ angles despite failing in multiple attempts to aim the spinal anesthesia needles towards extreme depths of intrathecal spaces, combined spinal epidural (CSE) needle sets can be used wherein thicker epidural needles act as longer spinal introducer needles with clear end-points being inside patientsâ€™ epidural spaces as compared to regular shorter spinal introducer needles remaining confined to undefined depths of subcutaneous tissues [11]. Moreover, it becomes easier to walk-off the bony interferences when encountered by the thicker epidural needles walking-off towards intrathecal spaces surrounded by bony spinous processes, laminas, transverse processes and pedicles. When the primary aim becomes to provide dense spinal anesthesia with no intention to leave epidural catheters in situ if CSE needle sets are being used as mentioned above, CSE-needle induced inadvertent large-hole dural puncturesâ€™ incidence may be avoided by prematurely testing for intrathecal spacesâ€™ access with thinner spinal anesthesia

needles through thicker epidural needles even when the thicker epidural needles may have given in false loss-of-resistance because even though the epidural needle may be located shallower than the needles truly located inside epidural spaces, they may still be much more appropriately located by being much more deeper than regular shorter spinal introducer needles.Â Â Â Â Â Â Â Â Â

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Third anecdote:

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Laryngeal mask airways (LMAs) are secured centrally in the midline inside patientsâ€™ oro-laryngopharynx. When the anesthesia circuits are connected to them from one side or the other side of the operating tables, there seems to be inadvertent drags on LMAs potentially risking the well-sealed LMAs cuffs to move away from their central positions covering patientsâ€™ laryngeal openings into inadequate-seal positions on one side or the other side inside patientsâ€™ laryngopharynx. To limit maladjusted movements of LMAsâ€™ cuffs [12-13], the internal-central-midline positions of LMAs may be externally ensured and supported by triangulating the anesthesia circuits towards the patientsâ€™ chest wherein patientsâ€™ chests act as the caudal bases of the schematic equilateral triangles with inspiratory and expiratory limbs of anesthesia circuits acting as the other two adjacent sides of the schematic equilateral triangles and Y-pieces of anesthesia circuits acting as the cranial apexes/vertexes of the schematic equilateral triangles. After encountering patientsâ€™ chests completing the schematic equilateral triangles, the remaining lengths of the inspiratory limbs and the expiratory limbs of anesthesia circuits can make U-turns at patientsâ€™ chests to move around the both sides of patientsâ€™ heads to be finally anchored onto the anesthesia circuitsâ€™ breathing tubesâ€™ holding and supporting tube trees centrally situated at operating tablesâ€™ head ends just cranial to patientsâ€™ heads.

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Fourth anecdote:

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Just like the previous anecdote, this anecdote has been my teachersâ€™ teachings which I have been trying to follow to-a-t [14-16]. Compared to places where cuff pressure gauges/manometers are readily available to quantitatively measure and to periodically correct the endotracheal tube cuff pressures, the places where such instruments are not readily available can qualitatively protect against overinflated endotracheal tube cuffs by leaving the cuff inflating syringes connected to the pilot balloons for few moments after inflating endotracheal tube cuffs so that these syringes can act as self-deflators of extra air getting instilled into the endotracheal tube cuffs whereby extra air can automatically find its way back into the attached syringes because the luer-locks of the syringes may be momentarily allowing the bypassing of pilot balloonsâ€™ one-way valves not only during the inflation of endotracheal tube cuffs but also during self-deflation of overinflated endotracheal tube cuffs to potentially normalize as much as possible the cuff-volumes and cuff-pressures in the endotracheal tube cuffs depending on individual patientsâ€™ tracheasâ€™ sizes.Â Â

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Final anecdote (at least for now):

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Finally, it took me sometime to self-realize and understand and promulgate after observing uniquely successful teachers and uniquely successful students that while teaching loss-of-resistance techniques for recognizing epidural spaces during epidural needle accesses and combined spinal-epidural needle accesses, it may have to become mandatory to go back to the original constant pressure methods wherein the loss of resistance is just that loss of resistance and nothing like injection of substance especially not injection of air [17-22]. It takes sometime to appreciate the subtle loss of resistance and over time the level of appreciation improves with the number of procedures. However, the injections of air or even injections of saline do not serve any purposes in regarding to confirming the initially appreciated loss of resistance except making them (injected air and/or saline) problematic for post-procedure safety of the patients (by leaving injected air where itâ€™s not needed physiologically and may be even pathological for the patients) and true successes of the epidural accesses (if solution dripping out of epidural needles can be confused to be just the injected saline when it may actually be the inadvertent dural puncture related cerebrospinal fluid). Instead of injections of air or saline to confirm the initially felt loss of resistance, the epidural needles may be withdrawn a few millimeters posteriorly towards the entry site and thereafter epidural spaces may be re-accessed with the second or may be even third time confirmatory appreciations of subtle losses of resistance.Â

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Summarily, these may be my anecdotes but like my inspirations from my kin, my students and my teachers, these anecdotes may inspire others to consider and develop their own anecdotes to validate for appropriateness and thereafter share the appropriate anecdotes with their peers, students and teachers.

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