Correspondence

Lumbar tattoos and epidural analgesia in 2018: time to let it go?

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Lumbar tattoos and epidural analgesia in 2018: time to let it go?

We read with interest the recent review by Zipori et al. about epidural analgesia (EA) and lumbar tattoos.[1] The authors stressed the lack of evidence regarding a risk of complications after neuraxial procedures. We hope to give some closure on what we think has been a contentious issue for anesthesiologists.

Since the initial positional letter by Douglas and Swenerton 15 years ago, no relevant complication has been reported in Western countries. In 2001, Kris Sperry, a pathologist experienced with tattooed skin, stated in the summer issue of the Society of Obstetric Anesthesia and Perinatology (SOAP) newsletter: "You should have no concern whatsoever in placing a needle through a tattoo and into the spinal or epidural space (…). There is really no danger at all in inserting a needle through tattooed skin" (https://soap.org/past-newsletter.php, accessible by SOAP members only). In various letters to journal editors, we have discussed the histopathology of normal tattooed skin, to counter Douglas and Swenerton's hypothesis.[2,3] Iatrogenic epidermoid tumors are related to epidermal elements implanted into the arachnoid space. In a healed tattoo, the epidermis is devoid of pigments.[4] Tattoo pigments are only found in the dermis, within fibroblasts, macrophages or free between collagen bundles of the dermis.[4] Pregnancy is one of the few contraindications for tattooing,[5] and as a consequence EA through a *fresh* tattoo during delivery, as documented by Zipori et al., is an infrequent occurrence.

Nicking the skin prior to inserting a needle is said to reduce the absorption of pigments,[1] but this has not been proven. Also, since pigments are spread out within the dermis,[4] to avoid potential contamination the skin nick must reach the hypodermis. If only a superficial nick is made in the dermis, there is a risk of pigment entrapment in the needle.