

Medical Alert Tattoos – A Pinch of Style Along with Patient Safety

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BACKGROUND

Tattoos

- Tattoos have become increasingly popular in the past 20 years
- First medical tattoos - during WWII; military would tattoo blood type on their forearm¹
- The use of medical tattoos can potentially be life-saving

Myotonia Congenita (MC)

- Prevalence of MC is 1 per 100,000²
- MC patients after stimulation have sustained contraction of skeletal muscles and delayed muscle relaxation
- The association between MC and malignant hyperthermia (MH) has been debated^{3,4,5}
- Some studies have mentioned the possibility of having a malignant hyperthermia-like episode but not true malignant hyperthermia⁵

CASE REPORT

- 16-year-old Caucasian female presented for long thoracic nerve decompression surgery
- The patient reported a history of muscles locking up during activity and cold temperature
- Her postoperative course during previous surgeries was complicated by difficulty breathing, delayed awakening and severe muscle pain
- She had a cheerleading accident 2 years ago that resulted in right long thoracic nerve injury
- Myotonia Congenita (MC) was diagnosed by EMG and genetic testing confirmed Thomsen Disease a subtype of MC
- After MC diagnosis, her mother researched the disease and correlated previous post-anesthetic problems to the MC and association of MC with Malignant Hyperthermia (MH)
- Her mother wanted an ideal way to alert medical professionals, but felt all pertinent information could not be accommodated on a medical alert bracelet or a necklace
- Patient was enrolled in the Medical Alert Foundation but her mother worried about the medical provider not having enough time to call them
- The patient had expressed a desire for tattoos
- They consulted various medical professionals to find a standard way to design a medical tattoo - The consensus was to get a tattoo on the forearm since Thomsen disease is a rare disease
- Based on information on “The Myotonia Congenita Project” website (www.myotoniacongenita.org), “No Succinylcholine” was included in the tattoo
- The tattoo artist recommended the tattoo be made larger than initially desired due to the nature of tattoos fading over time and for all the writing to be legible (Figure 1A and 1B)

DISCUSSION

- The family and the tattoo dictated the anesthesiologist to provide a non-triggering anesthetic
- The intraoperative and the postoperative course was uneventful
- Recent literature does not support an increased risk of MH in patients with Thomsen's Disease^{2,3,5}
- When a patient presents with a medical tattoo that says MH, the anesthesiologist may feel compelled to follow MH protocol despite the lack of evidence supporting the need
- The use of a tattoo as a permanent medical alert can potentially be a life-saving tool
- The “Star of Life” is a well-known symbol of health care and commonly used on medical alert tags, the patient would hopefully be able to draw attention to the tattoo in an emergency
- Forearm location seems to be popular due to the area being a common venipuncture site
- Without guidelines, even a large, striking tattoo can be missed in an emergency
- Having an established tattoo area and symbol to denote a medical alert can also prevent the tattoo from being overlooked
- Guidelines should be established to teach medical personnel what site and what symbol to include on a medical tattoo

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Figure Captions:

 Figure 1A: Posterior aspect of patient's forearm depicting red “Star of Life” along with patient's diagnosis

 Figure 1B: Anterior aspect of patient's forearm depicting medical alert information

- Written HIPAA authorization to use these images and health information was obtained from the patient's mother