



Taser Injuries – What Nurses Need to Know

Elizabeth Blunt, PHD, RN, FNP-BC, FAANP
Villanova University, Villanova, PA



Introduction

- Taser is an acronym derived from a children's book
- **T**homas **A.** **S**wift **E**lectric **R**ifle (TASER)
- Used to stun or incapacitate by interfering with the ability of the brain to communicate with the muscles.
- Provides a safer less than lethal force option
- Fires 2 small darts that act as electrodes
- Darts stay connected to the Taser by thin conductive wires.
- When 2 darts stick a 5 second electrical charge is released.



Medical Considerations

- Threshold to induce ventricular fibrillation in a normal heart is 10-50 joules.
- Most Tasers fire at 0.5 joules or less.
- The most popular model fires at 0.3 joules - *30 times less than the threshold.*
- High Risk Populations
 - Pregnant women
 - Visibly frail
 - Heart disease
 - Medical/mental crisis
 - Elderly persons
 - Young children
 - Persons under the influence of alcohol/drugs

How Safe are Tasers?

- Threshold to induce ventricular fibrillation in a normal heart is 10-50 joules.
- Most Tasers fire at 0.5 joules or less.
- The most popular model fires at 0.3 joules - 30 times less than the threshold.
- High Risk Populations
 - Pregnant women
 - Visibly frail
 - Heart disease
 - Medical/mental crisis
 - Elderly persons
 - Young children
 - Persons under the influence of alcohol/drugs

Conclusions

Current medical literature does not support the need for routine laboratory studies, electrocardiograms or prolonged observation after electrical exposure from a Electrical Control Device in an otherwise asymptomatic awake and alert individual.

Taser Removal

- Removal
 - Universal precautions
 - Local anesthetic may be used but not necessary
 - Stabilize the skin surrounding the barb, using hemostats firmly grasp the barb with the “notch” facing up, jerk in a smooth quick motion
 - Visually examine the barb to ensure it is intact
- Taser barbs are considered a sharp
- Treat major vessel injury as impaled object
- Return barb to law enforcement for evidence.
- Clean wound with cover
- Assess tetanus immunization
- Instruct patient on basic wound care and infection.