HIV, Hepatitis B and Hepatitis C Seroprevalence in a Canadian Trauma Population

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BACKGROUND

This is the first Canadian study to determine rates of HIV, Hepatitis B and C in the trauma population. The seroprevalence of HIV, Hepatitis B and C in our eligible consecutive trauma patients N = 377 trauma patients were comparable to those patients with blood tests completed and included in the study: It is vital to know the seroprevalence of these diseases for education, post exposure prophylaxis and counseling, and to establish potential screening guidelines.

METHODS

Eligible consecutive trauma patients N = 377 included Pts Excluded Pts
N=287 (76%) N=90 (24%)

Inclusion criteria:

- Adult trauma patients, regardless of ISS, and treated by the Trauma Team at London Health Sciences Centre were enrolled prospectively from January 1, 2003.

- Blood samples were taken as part of routine trauma blood work.

- Serum was analyzed for HIV antibody, Hepatitis B surface antigen and Hepatitis C antibody.

- Additional data collected included admission blood alcohol content.

- Isolation technique:
  - Any trauma patient treated by the Trauma Team age ≥ 18 yrs.
  - Any patient who did not have trauma blood work completed.

OBJECTIVES

- To study the seroprevalence of HIV, Hepatitis B and C in the adult trauma population of London, Ontario, Canada.

RESULTS

- 90 (24%) trauma patients were comparable to those patients with blood tests completed and included in the study: It is vital to know the seroprevalence of these diseases for education, post exposure prophylaxis and counseling, and to establish potential screening guidelines.

- This is the first Canadian study to determine the rates of HIV, Hepatitis B and C in the trauma population.

DISCUSSION

- This is significant given the high frequency (75-85%) with which acute disease progresses to chronic infection of which acute disease progresses to chronic infection.

- Overall, this is still a relatively rare and manageable risk for trauma surgeons who adhere to strict utilization of universal precautions.

CONCLUSIONS

- This is the first Canadian study to determine the rates of HIV, Hepatitis B and C in the trauma population.

- Our trauma population demonstrated a 3 fold higher Hepatitis C seroprevalence rate compared to the general population and poses the highest risk to the trauma team of the 3 blood borne diseases studied.

- This is significant given the high frequency (75-85%) with which acute disease progresses to chronic infection.

- This study highlights the importance of prevention and strict utilization of universal precautions in the setting of trauma.

- Despite this, there is still a relatively rare manageable risk for trauma care givers who adhere to strict utilization of universal precautions.