INTERNATIONAL TRAUMA LIFE SUPPORT

PERSONAL PROTECTIVE EQUIPMENT AND INFECTIOUS DISEASE

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The guidelines and references contained in this document are current as of the date of publication and in no way replace physician medical oversight.

INTRODUCTION

The purpose of this document is to update International Trauma Life Support (ITLS) instructors and providers of the position of ITLS in regard to Personal Protective Equipment (PPE) and infectious disease.

The recent surge of Ebola cases should serve as a reminder to all ITLS providers about the importance of proper PPE use when dealing with trauma patients because of potential for exposure to blood-borne and other infectious diseases. The risk of contracting Ebola for most of us is extremely remote, unless we are caring for patients in the affected areas or caring for someone who is at risk based on travel history. However, the risk of contracting other blood-borne diseases is very real and much more likely.

BACKGROUND

Because adequate history is often not available in severely injured trauma patients, we should use universal precautions and appropriate PPE when caring for any patient. Since care of the severely injured trauma patient can involve procedures that can aerosolize blood or other body fluids (intubation, IV, hemorrhage control), Emergency Medical Responders (EMRs) should always wear gloves and facemasks that protect the mucus membranes of the mouth, nose and eyes. Consider fluid proof gowns or coveralls as well, especially if patient is known to have a blood-borne infectious disease, such as Hepatitis B or C.

CONSIDERATIONS

Remember, adequate history is often not available in severely injured trauma patients. EMRs should use universal precautions and appropriate PPE when caring for all patients.

PROCEDURE

If caring for known or suspected Ebola or other viral hemorrhagic fever patients, follow the latest guidelines published by public health authorities in your nation. If no guidelines available, you can consider following the U.S. CDC guidelines available at www.cdc.gov/.

Virtually all guidelines encourage EMRs to use appropriate PPE with extreme care being exercised during doffing of the suit. EMRs are strongly encouraged to practice proper donning and doffing of PPE, as well as the ability to perform work functions in PPE, ideally under observation of an experienced instructor to provide the student with immediate feedback.

Many systems suggest no CPR in an Ebola patient. The outcome of traumatic cardiac arrest is dismal in any patient. If a known Ebola patient has a traumatic event and is in cardiac arrest, we agree that CPR and intubation and other invasive procedures will not benefit the patient and the risk of contamination of EMRs is increased in these situations. In short, the risk to EMRs is far greater than the very small chance of a successful resuscitation of a traumatic arrest patient.

Finally, when dealing with a patient with known or suspected viral hemorrhagic fever, procedures that generate aerosols or have high risk of contamination by blood or body fluids should be kept to the absolute minimum, and the number of providers potentially exposed should also be kept to a minimum.

MEDICAL OVERSIGHT

Medical oversight should review current literature and develop pre-hospital EMS protocols in regard to appropriate personal protective equipment and infectious disease. Implementation of this protocol should be monitored and supervised through a quality assurance program.

CONCLUSION

Emergency Medical Responders should use universal precautions and appropriate PPE when caring for any patient. Appropriate PPE includes gloves and facemasks that protect the mucus membranes of the mouth, nose and eyes and fluid proof gowns or coveralls as well if the patient is known to have a blood-borne infectious disease, such as Hepatitis B or C.

REFERENCES

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Current Thinking

PERSONAL PROTECTIVE EQUIPMENT AND INFECTIOUS DISEASE

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Abstract

This is the official current thinking of International Trauma Life Support (ITLS) regarding Personal Protective Equipment (PPE) and infectious disease.

Current Thinking

It is the position of International Trauma Life Support that:

1. Emergency Medical Responders should use universal precautions and appropriate PPE when caring for any patient.

2. Appropriate PPE includes gloves and facemasks that protect the mucus membranes of the mouth, nose and eyes.

3. Fluid proof gowns or coveralls are recommended if the patient is known to have a blood-borne infectious disease, such as Hepatitis B or C.