AUSTRALIAN RESUSCITATION COUNCIL

GUIDELINE 8.10

FIRST AID MANAGEMENT OF A SEIZURE

INTRODUCTION

A seizure may occur:

- in a person with epilepsy
- in almost any condition affecting the brain, e.g. head injury, stroke, meningitis, brain tumour, hypoxia
- in association with some poisons and drugs
- during withdrawal from alcohol and other drugs of dependence
- in children under five years, in association with a high temperature (febrile convulsion)

RECOGNITION

A seizure may take many forms. In a major seizure:

- there is a sudden spasm of muscles producing rigidity and the victim will fall down (tonic phase)
- jerking movements of the head, arms and legs may occur (clonic phase)
- the victim becomes unconscious which may be associated with noisy breathing, salivation and urinary incontinence.

Seizures not resulting in loss of consciousness require little first aid other than reassurance and protection of the victim from injury.

MANAGEMENT OF A SEIZURE

The first priority is to guard the victim from danger, eg. road traffic, fire or water.

If the seizure occurs in the water, then the victim may be best managed in the water. The victim's head and chest must be supported to keep the face above the water. However, if the person is in deep water, vomits or has a prolonged seizure, it is necessary to remove the victim from the water.

The victim should be managed as for any unconscious person. The rescuer should:

- remove the victim from danger or remove any dangerous objects which might cause injury to the victim
- avoid restraining the victim during the seizure unless this is essential to avoid injury
- turn the victim on the side as soon as possible to open and maintain a clear airway

- check for breathing and, if resuscitation is needed, give care following the Basic Life Support Flow Chart Guideline 7
- allow the victim to sleep under supervision at the end of the seizure. On recovery, the victim may be dazed or confused for some time
- seek medical advice as soon as possible.

The victim's mouth should not be forced open, nor attempts made to insert any object into the mouth.

NOTE: A person known to have epilepsy may not need urgent medical care unless the active or jerking part of the seizure lasts for more than 5 minutes, or another seizure occurs before the victim has fully recovered from the first.

FEBRILE CONVULSION

Febrile convulsions are associated with a high body temperature (usually greater than 38 degrees Celsius). It is the sudden rise in temperature, not how high it is, which causes the convulsion. Febrile convulsions occur in approximately 3% of all children at some stage in the first 5 years of life.

Febrile convulsions are brought on by a high fever which is usually caused by a viral infection.

Special Management of a Febrile Convulsion

- Follow guidelines outlined above for Management of a Seizure.
- Following the seizure leave the child resting on the side whilst drowsy.
- Seek medical advice as soon as possible.

REFERENCES

1. Centre for Community Child Health and Ambulatory Paediatrics, Royal Children's Hospital, Melbourne. Australian Paediatric Review 1996, 6; No 3: pp 1-2.
2. Centre for Community Child Health and Ambulatory Paediatrics, Royal Children's Hospital, Melbourne. Community Paediatric Review 1996, 5; No. 1: 3-4.
3. Long L, McAuley JW. Epilepsy: a review of seizure types, etiologies, diagnosis, treatment and nursing implications. Critical Care Nurse 1996; 16(4): 83-92.
4. Royal Children's Hospital, Melbourne. Paediatric Handbook, 5th Edition Ch. 12. Neurologic conditions 156-157,
5. St John Ambulance, Australia. Australian First Aid Canberra: St John Ambulance 1998.

FURTHER READING

ARC Guideline 2.1 Priorities in an Emergency
ARC Guideline 2.2 General Principles of Management of the Collapsed Person
ARC Guideline 3.3 Positioning an Unconscious Victim
ARC Guideline 4 Airway
ARC Guideline 7 Cardiopulmonary Resuscitation