PREVENTION OF RABIES IN HUMANS

Updated August 2011

HUMAN DISEASE IS FATAL BUT IS PREVENTABLE BY POST-EXPOSURE PROPHYLAXIS (PEP)
ALL ANIMAL BITES SHOULD BE MANAGED AS A POTENTIAL RABIES RISK

RISK ASSESSMENT FOR PEP

- Unprovoked animal attack
- Animal with abnormal behaviour – aggressive, salivating, wild animals may appear 'tame'
- Category of exposure – see below

NOTE

- All animal bites are reportable
- Vaccination history of animal may be unreliable
- There is NO blood test to confirm or exclude rabies transmission from animal to human
- Do not delay PEP pending confirmation of rabies in animal
- PEP is most effective if given immediately after the exposure
- Don't withhold PEP if there is a delay in the patient presenting to health facility
- All possible cases of rabies must be immediately reported to the nearest state veterinarian and/or animal health technician and/or private veterinarian. Only stop PEP if responsible veterinarian confirms a negative rabies diagnosis.

MANAGEMENT OF PATIENT EXPOSED TO POTENTIALLY RABID ANIMAL

GENERAL WOUND MANAGEMENT IS CRITICAL IN ALL PATIENTS:

- Flush well with soap and water or water alone for at least 5 minutes, clean with 70% alcohol solution and then apply iodine solution if available
- Avoid suturing and use of local anaesthetic agents
- Give antibiotics e.g. amoxycillin clavulanate when indicated
- Give tetanus booster

FURTHER SPECIFIC MANAGEMENT DEPENDS ON CATEGORY OF RABIES EXPOSURE:

- Vaccine course in category 2 and 3 exposures*
- Addition of rabies immunoglobulin in category 3 exposures is critical**

CATEGORIES OF RABIES EXPOSURE

Risk Category	Type of exposure	Action
1	• Touching or feeding animal • Licking of intact skin	• No action if history of vaccination is reliable • If history of vaccination is not reliable treat as category 2
2	• Nibbling of uncovered skin • Superficial scratch without bleeding	• Manage the wound, plus • Give full course of rabies vaccine* • **Give rabies immunoglobulin in addition to vaccine if patient is immunocompromised**
3	• Bites or scratches that penetrating skin and drawing blood • Licking of mucous membranes	• Wound management, plus • Give full course rabies vaccine* • **Give rabies immunoglobulin****

Rabies vaccine*

- **Indication: CATEGORY 2 AND 3 EXPOSURES**
- Course: day 0, 3, 7, 14 Day 0 = day of first vaccination
- IMI deltoid muscle in adults, anterolateral thigh in children, (NOT INTO GLUTEUS MAXIMUS)
- Dose: 1 amp per dose for adults and children
- Vaccine induces immune response in 7-10 days

Rabies immunoglobulin (RIG)**(300 IU in 2ml ampoule)

- **Indication: CATEGORY 3 EXPOSURES**
- Dose: 20 IU/kg infiltrated around wound, and remainder into deltoid in opposite arm to vaccine, NOT INTO GLUTEUS MAXIMUS
- If multiple wounds, dilute RIG in equal volumes of saline and infiltrate all wounds
- Give RIG immediately after vaccine administration
- Give RIG and vaccine as soon as possible after exposure for best effect
- If RIG is not immediately available, it can still be given up to 7 days after 1st dose of rabies vaccine, but not thereafter as the vaccine effect will be diminished
- Omit RIG if past rabies vaccination can be confirmed
- **Administration of rabies immunoglobulin is critical in category 3 bites**

IMMUNOCOMPROMISED PATIENTS

- Give RIG and vaccines in category 2 and 3 exposures
- Consider doubling the 1st dose of vaccines

NICD Hotline for Clinical Advice: 082 883 9920

Inform state veterinarian of incident

Adapted from Rabies: Guide for medical, veterinary and allied professions, Department of Agriculture

health
Department: Health
REPUBLIC OF SOUTH AFRICA

NATIONAL HEALTH LABORATORY SERVICE

sanofi pasteur
The vaccines division of sanofi-aventis Group