

Improvised Warm Rooms for Newborn Care

Arguably the greatest single advance in neonatal care came with the discovery that premature babies did better if kept warm. There is no single method to keep babies warm that can be appropriate for different parts of the world, especially if cost is taken into consideration. Our unit has been using graded warm rooms for better thermal control of the high-risk newborns using electrical room heaters(1). There is some inconvenience to the staff working in the unit but then in tropics one is frequently exposed to such an environment. Since we perform fewer investigations and procedures the time spent in these rooms at a stretch is quite short(2).

We have developed a simple and inexpensive method to regulate the temperature in a desired range and also maintain the functioning of the system during power failure.

A second hand car radiator with a compartment for a heating element at the bottom is used for this purpose. Water in the radiator dissipates heat with the help of a small fan fitted behind the radiator.

The temperature of the room is controlled by using digital indicator and temperature controller (DITC). When the temperature drops below the set point, the fan starts moving and when the temperature exceeds the set point, the exhaust fan is switched on.

In case of power failure, the fan can work on the battery and pre-warmed water can be poured in the radiator.

The cost works out to be Rs. 7800/- for a room that accommodates four babies. The system can be operated without DITC also. In that case, the system is switched on and off manually and a wall thermometer can be a guide in this regard. The cost then comes down to Rs. 800/- only.

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REFERENCES

1. Daga SR, Chandrashekhar L, Pol PP, Patole S. Appropriate technology in keeping babies warm in India. *Ann Trop Pediatr* 1986, 6: 23-25.
2. Daga SR, Daga AS. Reduction in neonatal mortality with simple interventions. *J Trop Pediatr* 1989, 35: 191-196.

Red Man Syndrome

Red man syndrome is an adverse reaction described with the use of vancomycin(1) and rifampicin(2,3). Red Man Syndrome due to rifampicin is a dose related non-fatal condition characterized by red orange discoloration of skin, mucus membrane, body secretion like tear and saliva, faeces and urine. Staining of contact lens

may also occur(4). The discoloration is caused by rifampicin and its metabolites without any derangement in liver function(1). Vancomycin associated Red Man Syndrome is rarely life threatening and is characterized by localized skin rashes and/or hypotension. It is probably an idiosyncratic reaction(1). In sensitive person, rapid infusion of vancomycin results in its precipitation(5). Vancomycin related hypotension is as a result of peripheral vasodilatation following histamine release; and myocardial dysfunction secondary to endogenous myocardial histamine release or direct inotropic myocardial depression(6).

Recently we came across a similar case due to high dose of rifampicin. A 2-year old boy was receiving rifampicin and isoniazide for the treatment of primary complex. A bottle of Rimactane (Ciba-Geigy) was present in the house. Out of 150 ml, the child consumed about 60 ml (1200 mg) of rifampicin. Four to five hours after ingestion, the child was brought to hospital with the complaint of red-orange discoloration of skin and mucus membrane. His tear and saliva were also red in color. He was passing very dark, orange colored urine. Investigations including routine and serum bilirubin 0.8 mg/dl, serum alkaline phosphatase 130 IU, SGOT 52 IU and SGPT 48 IU were within normal limits. Further therapy with rifampicin and isoniazide was stopped. The patient was treated with IV infusion only. The red color of skin and mucus membrane disappeared after 24 hours but the child was passing red orange color urine. On third day, the urine also became very light or-

ange color. He was discharged with the advise to come after seven days for repeat investigation, for which he did not come.

Rifampicin is a commonly prescribed antitubercular drug. However, none of the literature by the pharmaceutical companies(7) mention about this particular side effect of drug. Pediatricians, while prescribing rifampicin, should explain the side effects of the drug to the parents and advise storage out of reach of small children.

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REFERENCES

1. Levy M, Koren G, Dupis L, Read SE. Vancomycin induced red man syndrome. *J Pediatr* 1990, 84: 572-580.
2. Gross DG, Dellinger RP. Red orange persons syndrome. *Cutis* 1988, 42: 175-177.
3. Ellenhorn MJ, Barceloux DG. Rifampicin. In: *Medical Toxicology: Diagnosis and Treatment of Human Poisoning*. New York, Elsevier Science Publishing Company, 1988, pp 395-399.
4. Lyon R. Orange contact lenses from rifampicin. *N Eng J Med* 1979, 382-273.
5. Newfield P, Roizen MF. Hazards of rapid administration of vancomycin. *Ann Int Med* 1979, 91: 581.
6. Cohen LS, Wechlers AS, Mitchell JH, Glick G. Depression of cardiac function by streptomycin and other antimicrobial agents. *Am J Cardiol* 1970, 26: 505-511.