

# Drugs, Dangers and Directions

Pages with reference to book, From 48 To 51

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These questions were received and answered by the Drug Information Centre, recently set up at the Khyber Medical College, Peshawar, by the Department of Pharmacology and Therapeutics.

## Question

Which preparation of iron could be conveniently administered preferably in syrup form to provide the following doses for different age groups?

1. 100 mg B.I.D. orally

2. 100 mg T.I.D. orally

For: (a) Pregnant Women, (b) Lactating mothers, (c) Young Girls. 12-18 years, (d) Young Boys. 12-18 years (e) Children 1-5 years.

Sulaiman Daud, Paediatric Dept., K.T.H. Peshawar.

## Answer

The Iron preparation available in the market which provides 100mg of Iron as succinate is marketed by Wellcome of Pakistan Ltd., under the Trade name of Ferromyn Elixir and Ferromyn tab.

Ferromyn Elixir contains Ferrous succinate anhydrous 100mg. Each 100mg of Ferrous Succinate will deliver 35mg of elemental Iron.

Other preparations such as Polysaccharide Iron complex elixir 100mg/ml and Tab. 50mg and Ferrous Fumerate Suspension 100mg/5ml are not available in the market.

## Question

My nephew swallowed a rat poison by the name of Brumoline Flakes but apparently he seemed normal. What is the treatment for possible poisoning?

I am Kaznti, Director P.M.R.Ci Islamabad.

## Answer

Rat poison Brumoline Flakes, is a Spanish (Barcelona) preparation containing 4-Hydroxy Coumarin 0.03115% Extract of organic sweet clover 0.004%

The active ingredient is 4-hydroxycoumarin intended to cause bleeding in rats and so are the chances in man.

The other ingredient is meant only to attract the animal towards taking this poison.

Anticoagulant antagonist Vit K 10mg may be given I.M. Gastric lavage is needed.

Supportive treatment may be kept ready as and when the need arises.

## Question

A 19 year old epileptic patient received Dilantin for the last five years. He has developed Lymphoma, on biopsy confirmed as Dilantin Lymphoma.

1. Would it regress on withdrawal of the drug?

2. Which drug should replace Dilantin to prevent relapses?

3. Any side effects of the replacing drug?

Fazal Ahmad Assistant Professor of Pathology, Khyber Medical College, Peshawar.

## Answer

The phenytoin lymphadenopathy is a fairly well documented side effect and you find Bjornberg. A.

Hoist committee has got 9 reports about lymphadenopathy and one report on malignant lymphoma during the seventies. Interestingly there have also been 4 cases of carbamazepine in monotherapy

suspected to cause this syndrome. The mechanism behind this effect seems to be a drug induced

depression of the immunological function. Sorreil and collaborators (1971) report about 63 patients on

long term phenytoin therapy. About 20 percent of these had low immunoglobulin A levels and a

decreased response to various antigens by skin-test. In an article by Fontane et al (1977) it is stated that predisposing factors are needed for the development of IgA depression. Charles-worth (1977) presents a case of phenytoin induced pseudolymphoma. Initially there was no skin reactions to tuberculin and a variety of other antigens. Half a year after stopping the treatment the patient developed normal and positive reactions to these antigens. Scully and Associates (1980) report a case of "angioimmunoblastic lymphadenopathy" where phenytoin medication was probably of importance for induction of the disease. This patient recovered and her antiepileptic therapy was changed from phenytoin to phenobarbital.

Reynolds (1975) does not specifically comment on the reversibility of Phenytoin induced lymphadenopathy. Lymphadenopathy is reversible as the closely related depression of various immunological parameters seems to be reversible. In a longer perspective we are somewhat uneasy about the side effect profile. A change to carbamazepine would be highly questionable as this drug might also induce the syndrome. An alternative approach would be to use phenobarbital and carefully adjust the minimum level that controls the seizures.

## **Conclusion**

Lymphadenopathy is a documented side effect of phenytoin. The drug also seems to impair immunological reactivity.

## **References**

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## **Question**

How effective is Rifampicin in the treatment of Tuberculous Meningitis? Does it cross the Blood Brain Barrier in sufficient amounts to be effective?

Nasser Uddin Azam Khan, Med. "A" Unit, Khyber Hospital, Peshawar.

## **Answer**

Rifampicin is distributed throughout the body and is detectable in many organs and body fluids including, CSF, (Weinstein, 1975).

Rifampicin is active orally, penetrates well into the cerebrospinal fluid Havard, (1976). And is thus of use in the treatment of Tuberculous Meningitis. Due to its excellent penetration in CSF it can be considered as an ideal companion drug to Isoniazid for the treatment of patients with Tuberculous

Meningitis, (Melmon and Morrelli, 1978; Weinstein, 1975).

Rifampicin is a drug of choice for Chemoprophylaxis of meningeal disease in household contact of patients with such infections, (Weintein., 1975).

Rifampicin is the most important drug in the therapy of Tuberculous Meningitis which approaches activity of Isoniazid (Hobby, 1969). In Meningeal Tuberculosis it is essential to use, Isoniazid which penetrates well into the CSF. Of the alternative drugs Rifampicin, Ethionamide and cycloserine readily enter the CSF from blood.

Beeson and McDermott (1975) suggest that in the treatment of Tuberculous Meningitis, therapy should always include Isoniazid and either rifampicin or Streptomycin, probably the former.

## References

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## Question

Date expired tetracycline injections: Are they fit to be used for patients?

Rehmatul Haq Rehmati, Central Hospital for Afghan Refugees.

## Answer

Some of the drugs donated by friendly countries are date-expired and may be analysed for effectiveness. Testing the quality of drugs is the job of the Drug Testing Laboratory at the National Institute of Health, Islamabad. The Drug information Centre at K.M.C. has the facilities for collecting Information from references in the Library and other relevant sources so far. This information which is authentic and unbiased is then disseminated to the prescribing Doctors.

The definitive samples are brown and brown-black in colour and have use expiry date printed as 1st October 1980 on them.

However, once the date of a drug has expired, the Pharmaceutical firm also does not take the responsibility of efficacy and safety of the drug.

Degraded products of Tetracycline cause a fairly characteristic syndrome, Ehrlich and Stein (1963) and Gross (1963).

Abnormalities similar to those seen in the Fanconi's syndrome were recognized by Gross, (1966) and Frimpter et al, (1963). You may refer to the following:

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### **Question**

Is Ethambutol not recommended to be used under five years of age?

Nasser Uddin Azam Medical "A" Unit, Khj'ber Hospital Peshawar.

### **Answer**

The earliest manifestation of toxic effect is a decreased ability to perceive the colour green and may be uni-lateral. Boedekar & Dauher (1974).

The visual effects ascribed to ethambutol include optic neuritis, papillitis peripheral and Central Scotoma and loss of colour discrimination or ability to see green or red. (Krantz and Carris, 1972, Thomson 1976, Boedekar and Dauher 1974). The above effect occurs in some patients on full doses given for several months, (Meyers, Jawet and Goldfien 1978). The incidence of retrobulbarneuritis appears to be more frequent when administered in divided than when given as a single dose of 25 mg/Kg/ day but occurs more often with 50 mg/Kg/day, (Weistein 1975).

Experience with Ethambutol in the paediatric age group is limited. The drug should not be used in a child whose visual acuity cannot be tested, (Silver, Kempe and Bruyn 1975). Its use should be avoided in infants and young children in whom visual acuity cannot be monitored, (Manson, 1978). In the light of the above, the prescribing doctor is left with the decision to weigh benefits against risks involved in a particular patient who must get an effective anti-tubercular drug.

### **References**

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