CosmoFer Total Dose Infusion Guidelines

These guidelines are aimed at the Doctor prescribing total dose CosmoFer and the nurse who will be preparing, administering the infusion and monitoring the patient.

Indication
CosmoFer has been licensed for administration in a number of ways.
This guideline is specifically for total dose infusion for adult patients with iron deficiency anaemia.

Contraindications
- Non-iron deficiency anaemia
- Iron overload or disturbances in utilization of iron (e.g. haemochromatosis, haemosiderosis)
- Patients with a history of asthma, eczema or other atopic allergy should not be prescribed IV Cosmofer
- Decompensated liver cirrhosis and hepatitis
- Patients with rheumatoid arthritis with symptoms or signs of active inflammation
- Acute renal failure
- Acute or chronic infection, because parenteral iron administration may exacerbate bacterial or viral infections.
- Drug hypersensitivity to iron mono- or disaccharide complexes or iron dextran.

Caution
Patients with (auto) immune disorders or inflammatory conditions (e.g. SLE, RA) are at higher risk of a type III allergic reaction from CosmoFer.
When parenteral iron therapy is considered essential in patients with asthma, allergic disorders and inflammatory disorders, the intramuscular route is to be preferred and is out with the scope of this guidance.

Procedure for Calculating Dose
Dose
Dose (mg of iron) = [(A – B) x C x 0.24] + 500
Where:
A = Target Haemoglobin (g/l)
B = Actual Haemoglobin (g/l)
C = Body weight (kg) (use ideal body weight, use pre-pregnant weight if 2\textsuperscript{nd}/3\textsuperscript{rd} trimester)

(See SPC for explanation of equation)\textsuperscript{1}

To calculate ideal body weight, use the following equation:
Ideal body weight (Male) = 50kg + (2.3kg x height in inches over 5 feet)
Ideal body weight (Female) = 45.5kg + (2.3kg x height in inches over 5 feet)

- Divide the calculated dose by the patient’s weight to ensure it doesn’t exceed 20mg/kg.
- If dose exceeds 20mg/kg it should be rounded down to 20mg/kg OR administration of the total dose has to be split over several days.
The dose should be rounded to the nearest 25mg for ease of administration. Available as 100mg in 2ml amps (50mg/ml).

- Doctors – when prescribing, please ensure the patient’s weight, current Hb and target Hb are also written on the drug chart.

Observations

- Check blood pressure and pulse prior to the start of the infusion.
- All patients must continue to have blood pressure and pulse checked every 15 minutes for the first hour of the total dose infusion, then every 30 minutes for the remainder of the infusion and continue for 30 minutes **after the end** of the infusion
- Hypersensitivity reactions can be delayed with total dose iron infusions; respiratory difficulty and/or cardiovascular collapse and fatalities have been reported, and so should only be administered when staff trained to evaluate hypersensitivity reactions as well as resuscitation facilities are immediately available. If there are any signs of hypersensitivity (e.g. urticaria, rashes, itching, nausea and shivering) or intolerance at any stage of the infusion, administration must be stopped immediately.

Administration

- The first 25mg should be given no faster than over 15 minutes. This is no longer classed as a test dose and should be given to every patient every time they receive Cosmofer as a total dose infusion.²
- Add 25mg to a 50ml bag of sodium chloride 0.9% or glucose 5% and give over 15 minutes. This dilute bag will run at 200ml per hour for 15 minutes
- If no adverse effects occur the remaining dose should be added to 500ml sodium chloride 0.9% or glucose 5%.
- Suggested rate is 50ml per hour for 60minutes. If no adverse reactions occur, increase the rate to 100ml per hour for the next 60 minutes then increase further to 150ml per hour for the remainder of the infusion. (Hence 500ml would run over 4 hrs and 20minutes.).

Further information

Delayed reactions such as arthralgia, myalgia and sometimes fever are well described and may be severe. They can occur from several hours to four days post infusion. Symptoms may last 2-4 days and settle spontaneously or following the use of simple analgesics. Patients should be advised of this and advised to contact their GP if they experience any side effects at home after the infusion.

It is imperative that the GP is sent a letter stating what the patient has received and what the potential side effects may be as well as guidance on when to check the FBC and ferritin.

References