What vaccines are recommended for a patient who has had a splenectomy?

Severe and life-threatening infection in patients with an absent (or dysfunctional) spleen is a life-long risk. These patients are most at risk from infections caused by encapsulated bacteria such as *S pneumoniae*, *H influenza* type b (Hib) and *N meningitides*. Therefore, immunisation against these organisms is considered routine.

- Pneumococcal immunisation should be performed every 5 years, using the polyvalent pneumococcal vaccine. While international guidelines have recognised the potential superiority of the conjugated pneumococcal vaccines, their use is currently not recommended as standard practice.
- A single dose of *Haemophilus influenza* type b vaccine should be given every 10 years. Most patients over the age of 18 years can be assumed to have acquired immunity, but this may not be sufficient to provide adequate protection in the absence of a spleen.
- Meningococcal vaccinations should be repeated every 5 years, using A & C conjugates or the quadrivalent (A, C, W135 & Y) vaccine.
- Splenectomised patients should also receive an influenza vaccine every year.

Prophylactic daily antibiotics should be considered in all cases, but especially in patients:
- Within the first 2 years after splenectomy
- Under the age of 16 years
- With underlying immune dysfunction

References:

A Labrador dog has swallowed 8 capsules of Roaccutane® 10mg. How is this to be treated and what are the implications in terms of toxicity?

Emergency treatment for isotretinoin overdose involves evacuation of the stomach, which may be useful for up to 2 hours after ingestion. Activated charcoal is not recommended and supportive therapy for adverse effects may be necessary.

Isotretinoin has been shown to exhibit lower bioavailability in a number of animals when compared to humans. In dogs, it has been suggested that its bioavailability is significantly diminished, as a result of reactions occurring in the gut lumen.

Isotretinoin is used therapeutically to treat dogs suffering from conditions such as Schnauzer comedo syndrome, ichthyosis, sebaceous gland hyperplasias and adenomas. The normal dosage in dogs varies from 1 to 3 mg/kg body weight (dose in humans is 0.5 to 2 mg/kg body weight). Acute toxicity studies in dogs have revealed no serious outcomes at dosages of up to 79.8 mg/kg body weight, although diarrhoea did occur in dogs given doses higher than 13.1 mg/kg.

The adverse effects of isotretinoin overdose are usually related to symptoms of hypervitaminosis A. This dog consumed 80 mg of isotretinoin in total, not a sufficient amount to be concerned about toxicity, and should not experience any significant adverse effects from the single dose.

**Note:** In humans, an overdose would be treated the same way. The acute toxicity of isotretinoin is less severe than might be expected. Abdominal pain, ataxia, dizziness, drowsiness, facial flushing and itchy skin have been reported.

References:
- The Merck Veterinary Manual – Vitamins and Minerals: Retinoids
- Roaccutane product Information – Roche Canada.

Can you identify this tablet? It is pale green, round, scored on one side and the inscription MJ on the other. (See p.51)