*__Liquid tranexamic acid,__ used topically to assist clotting, may be ordered in advance by dentists or clinicians from St Mary's Hospital Pharmaceutical Unit, (SMPU), 20 Fieldway, Cardiff, CF14 4HY

Orders to be placed by Fax: 02920 748130
For General Enquiries: Tel: 02920 748120
Email: smpu@cardiffandvale.wales.nhs.uk

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itp

Protocol for Dentists

Essential information for dentists treating patients with thrombocytopenia

Thrombocytopenia

The normal platelet count is 150 - 400 x 10^9/l throughout life.
Thrombocytopenia is associated with abnormal bleeding and, in general, the severity of the hæmostatic defect is proportional to the platelet count.

Platelet Count		Clinical Effect
100 - 150 x 10^9/l	–	No consequences.
50 - 100 x 10^9/l	–	Very mild bleeding tendency.
20 - 50 x 10^9/l	–	Significant bleeding tendency, especially after injury or surgery.
<20 x 10^9/l	–	Very severe bleeding tendency including spontaneous bleeding from nose, mouth and gums.

Causes of Thrombocytopenia

Thrombocytopenia may be due to :-

(i) Failure of platelet production due to:–

- aplastic anæmia
- bone marrow infiltration
- vitamin deficiency (especially B12 and folic acid)

(ii) Increased platelet destruction due to:–

- (auto) immunity
- drugs
- splenomagaly
- viral infection
- consumption coagulopathy (DIC)

The correct diagnosis can usually be made by taking a full history and clinical examination, and often a bone marrow examination is needed.
Other blood tests may be helpful, but are rarely essential.

Immune Thrombocytopenia (ITP)

Formerly known as idiopathic thrombocytopenic purpura, ITP is one of the immune causes of thrombocytopenia and is due to excessive platelet destruction. The platelet count is often below 50 x 10^9/l and for severe cases is in single figures. Patients usually present with skin purpura and/or bleeding from the nose, mouth or gums. In young children, viral infection is an important cause, but in adults there is frequently no obvious reason for the illness. In older adults the condition tends to cause a more chronic illness with less obvious bleeding even when the platelet count is very low.

Management

(a) Establish the diagnosis:-

If ITP is suspected, a platelet count should be performed. Referral to an hæmatologist is necessary to confirm the correct diagnosis.

(b) General Management:-

For symptomatic patients expect treatment with intravenous immunoglobulin (IVIg) or corticosteroids. For failure of platelet production expect replacement therapy with platelet concentrates.
Aspirin, drugs containing aspirin and non-steroidal anti-inflammatory drugs (NSAIDs) should be avoided. Paracetamol and codeine are safe.
No intramuscular injections should be given, but subcutaneous and intravenous injections may be given where necessary.

(c) Dental Treatment:-

Platelet count		Treatment
>100 x 10^9/l	–	proceed
50 - 100 x 10^9/l	–	consult an hæmatologist. (It is wise to avoid inferior dental block unless the platelet count can be raised above 100 x 10^9/l.)
<50 x 10^9/l	–	consult an hæmatologist

Local infiltration analgesia is acceptable unless the patient is bleeding. After dental extraction the antifibrinolytic drug tranexamic acid* may be useful.

Splenectomised Patients

Some patients with ITP may have had a splenectomy as part of their treatment. Before surgery such patients should have been:-

(i) vaccinated against:-

- hepatitis B
- pneumococci
- hæmophilus influenzae
- Some authorities also recommend vaccination against meningococci

(ii) given regular antibiotics:-

- Penicillin V 250mg bd or erythromycin 250 mg bd are usually given long term. If a dental procedure carries an added risk of infection then an appropriate additional antibiotic should be given in a full therapeutic dose.

**see overleaf*