GUIDELINE FOR MANAGEMENT OF EXTRA-CRANIAL HAEMORRHAGE

1. Superficial Bleeding

Venflon sites, venepuncture sites, nose bleeds, other superficial sites

- Direct pressure
- Apply dressings
- IV fluids as required
- Continue alteplase infusion unless bleeding problematic

2. Bleeding from non-compressible site

GI haemorrhage, urogenital haemorrhage, retroperitoneal haemorrhage, other parenchymal haemorrhage

- Contact Stroke Consultant on-call
- Restart 15 minute observations
- Stop alteplase infusion
- Secure IV access with 2 wide bore peripheral cannulae
- Draw blood (FBC, U&E, CAL, PT, aPTT, Fibrinogen, ABG, X-Match up to 8 units packed red cells depending on the severity of the haemorrhage)
- Resuscitate with warmed crystalloid / colloid infusions using pressure bags
- Request suitable red cells:
    - Aim to use fully cross-matched – 30 minutes to issue
    - Group specific – 10 minutes to issue
    - In the event of a major haemorrhage utilise Major Haemorrhage Protocol
- Institute monitoring:
    - SaO_2, BP, RR, HR, temperature every 15 mins
    - Record hourly urine volume
    - ECG
    - Consider HDU care
    - Repeat FBC, U&Es, Ca^{2+} and clotting screen regularly, at least every 4 hours or after infusion of clotting factors
    - Catheterisation, CVP, arterial lines and ABGs may be relatively contraindicated given administration of thrombolysis
- Discuss use of blood products, e.g. FFP, cryoprecipitate and platelets, with Haematology Consultant. Monitor FBC and coagulation screen regularly to guide use of these products.
- Consider tranexamic acid or alternative
- May need to seek surgical help