Pressure transducing systems

Uses
1. arterial pressure
2. central venous pressure
3. pulmonary artery pressure
4. intraabdominal pressure
5. intracranial pressure (via EVD)
6. compartment pressure

Features
(i) Disposable
(ii) Light weight
(iii) Robust
(iv) Clear plastic
(v) Snap flush to allow testing of dynamic response of the system (dampening & frequency response)
(vi) 3-way tap to allow blood sampling & zeroing

Methods of insertion and/or use
1. direct cannulation
2. transfixon
3. Saldinger technique

Potential complications

Other information

Haematoma (including retroperitoneal bleeding from femoral lines)
Distal ischaemia (risk factors include shock, sepsis, embolus of air or clot, hyperlipoproteinemia, vasculitis, female sex, prothrombotic states, accidental intra-arterial injection of drugs)
Infection
Retrograde embolisation (e.g. cerebral embolus from retrograde flow of air or clot during flush — radial, brachial or axillary lines)
Pseudoaneurysm
Arteriovenous fistula
Compartment syndrome
Damage to neighbouring structures, e.g. median nerve, bowel (femoral approach)
Exsanguination from accidental disconnection