



INTERVENTIONAL RADIOLOGY



Canadian Interventional Radiology Association

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Association canadienne de radiologie d'intervention

COMMON PRINCIPLES

- WE USE DYE – WHERE IS IT GOING?
 - IN THE BLOOD VESSEL – NEED TO KNOW CREATININE CLEARANCE
 - IF > 60 NO PROBLEMS
 - IF 30-60 GENERALLY NO PROBLEMS – GIVE FLUIDS FOR INPATIENTS, CHICKEN SOUP AND LOTS OF WATER FOR OUTPATIENTS
 - IF < 30 REQUIRE NEPHROLOGY CONSULT
 - ANYWHERE ELSE – CREATININE NOT IMPORTANT

COMMON PRINCIPLES

- WE STICK THINGS INTO PEOPLE
 - CBC/COAGS FOR ALL!
 - CBC
 - PLATELETS > 50 NOT A PROBLEM
 - PLATELETS 30-50 MAY BE A PROBLEM
 - PLATELETS < 30 A PROBLEM
 - PLATELETS IN A PINCH
 - INR
 - PROCEDURE DEPENDENT
 - FOR ELECTIVE PROCEDURES
 - 1.5 IS OK, 1.6 IS NOT
 - IF THE INR CANNOT BE CORRECTED THEN RISK/BENEFIT MUST BE CONSIDERED
 - FFP IN A PINCH



MSK INTERVENTIONS



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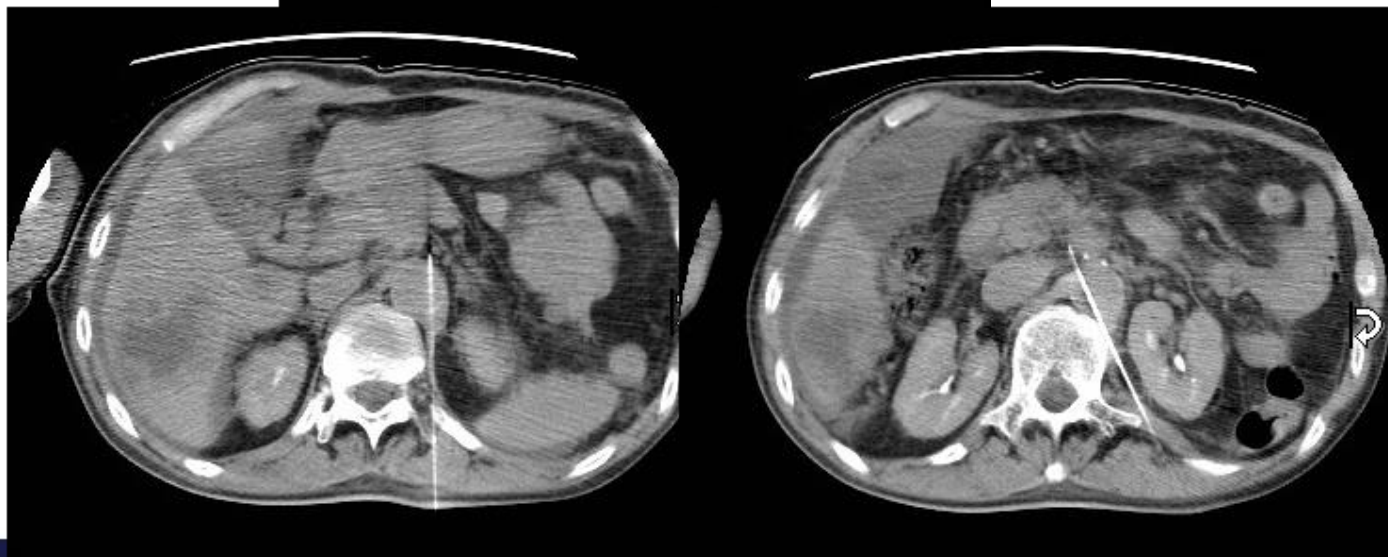
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FACET, EPIDURAL AND JOINT INJECTIONS

- Basically...
 - have pain, will inject steroids
 - fluoroscopically guided procedures
 - ultrasound also used

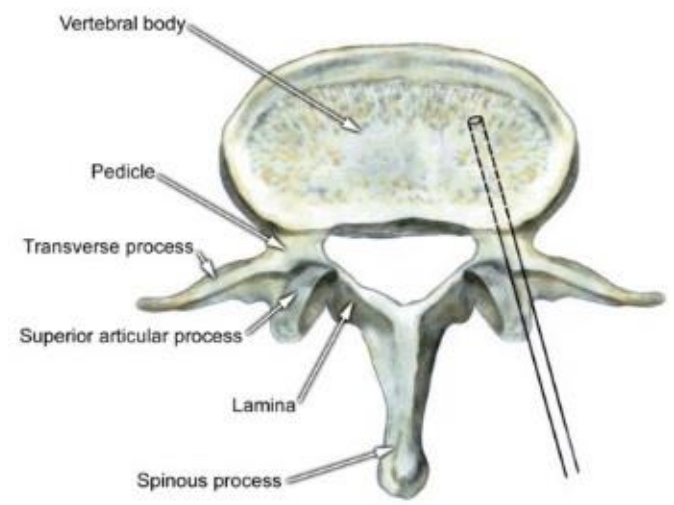
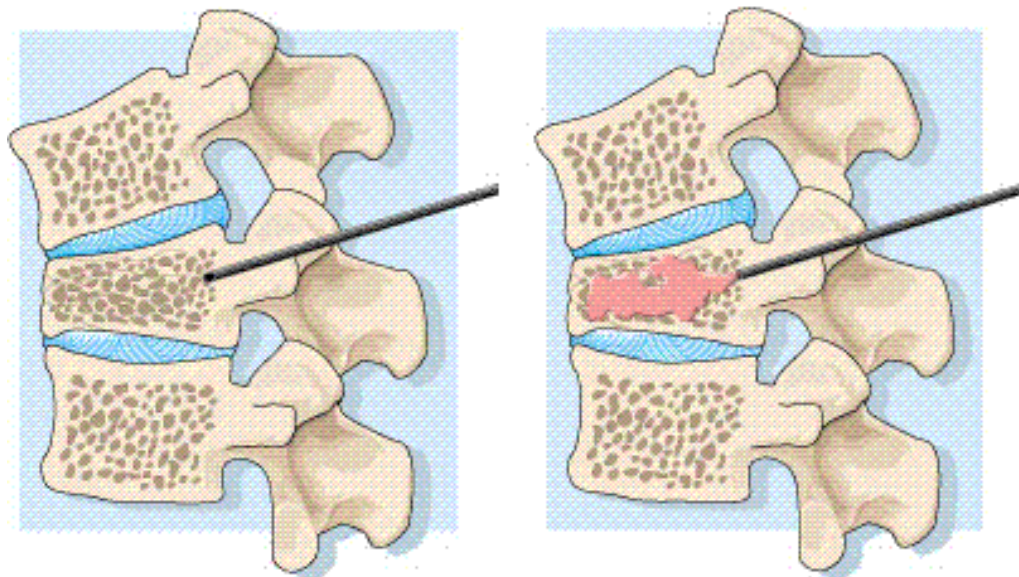


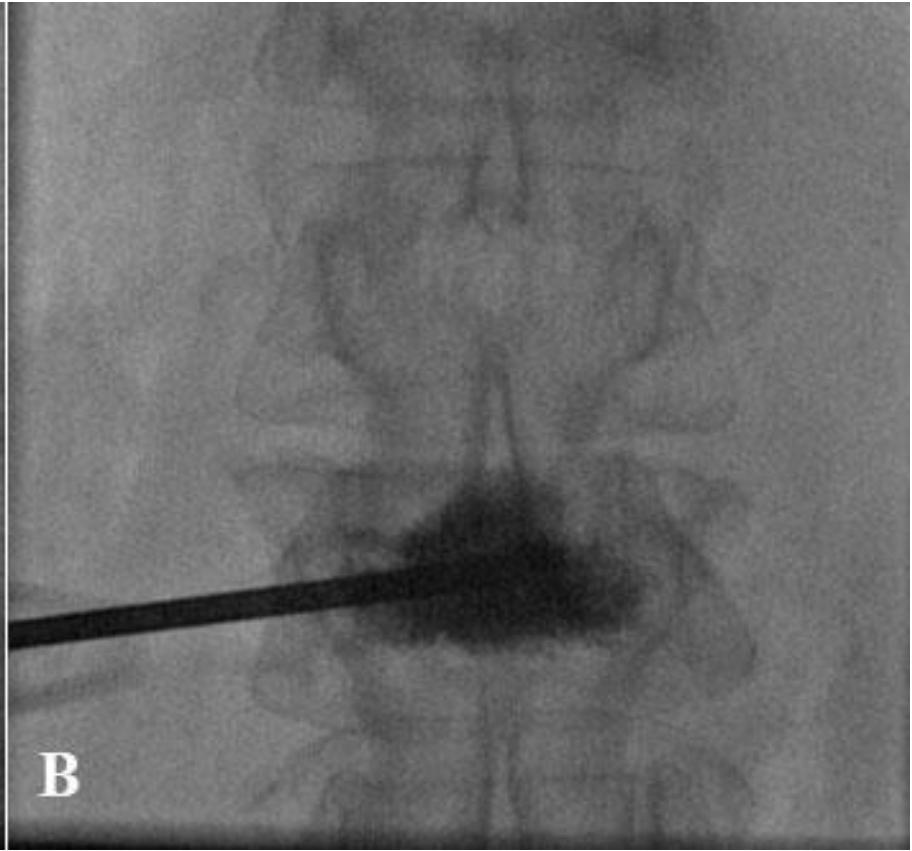
NERVE ROOT BLOCKS



VERTEBROPLASTY/KYPHOPLASTY

- PERFORMED FOR PAIN RELIEF SECONDARY TO SPINAL COMPRESSION FRACTURES
- MOST COMMONLY DUE TO OSTEOPOROSIS OR METASTATIC DISEASE
- USUALLY PERFORMED UNDER LOCAL ANESTHESIA
- COAXIAL TECHNIQUE - 10 GAUGE NEEDLE ADVANCED INTO VERTEBRAL BODY VIA TRANSPEDICULAR APPROACH UNDER FLUOROSCOPY
- CEMENT INJECTED VIA A 13 GAUGE NEEDLE
- STABILIZES THE FRACTURE AND RELIEVES PAIN





KYPHOPLASTY

- SIMILAR TO VERTEBROPLASTY ONLY THE CEMENT CAVITY IS PRE-EXPANDED USING A BALLOON
- SOME VERTEBRAL BODY HEIGHT IS REESTABLISHED
- NO DEFINITE CLINICAL BENEFIT
- DECISION BETWEEN VERTEBROPLASTY AND KYPHOPLASTY USUALLY REFLECTS PHYSICIAN PREFERENCE



Balloon inserted into fractured vertebra



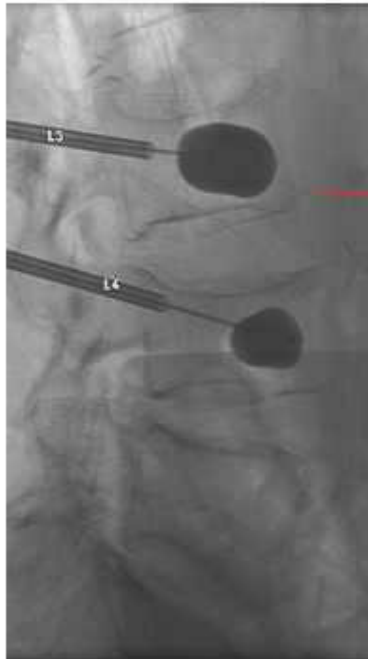
Balloon inflated inside damaged vertebra



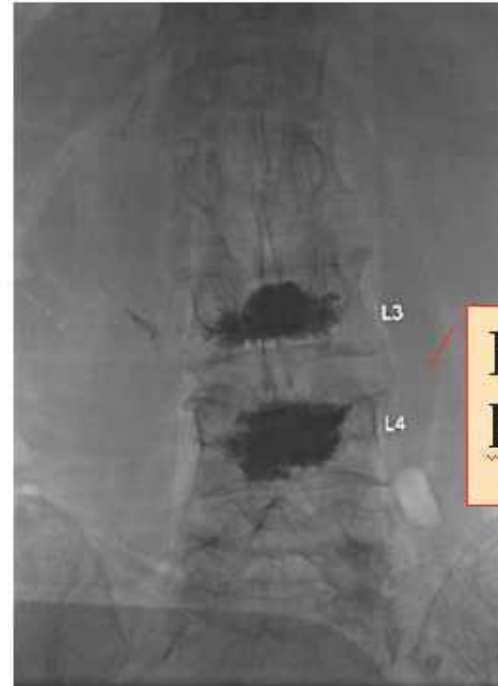
Special material injected into fractured vertebra



Special material hardens, stabilizing vertebra



**Balloon
inflated in
vertebra**



**Post
kyphoplasty**

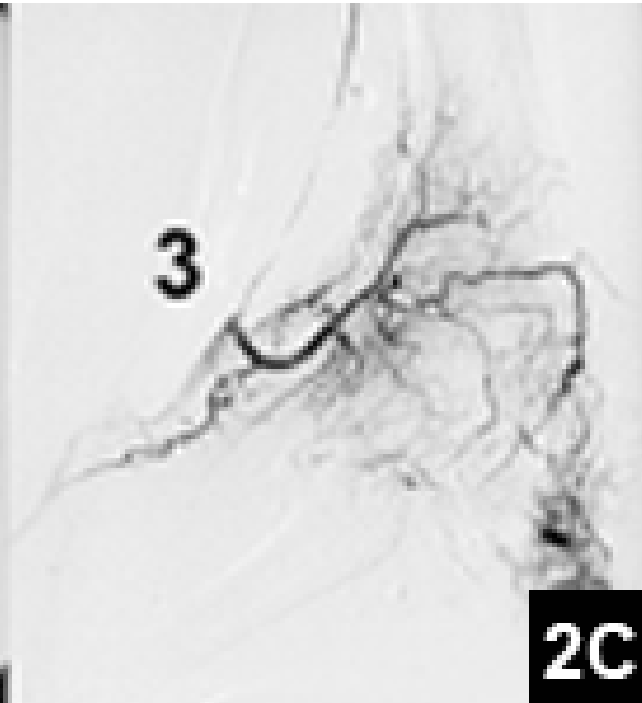
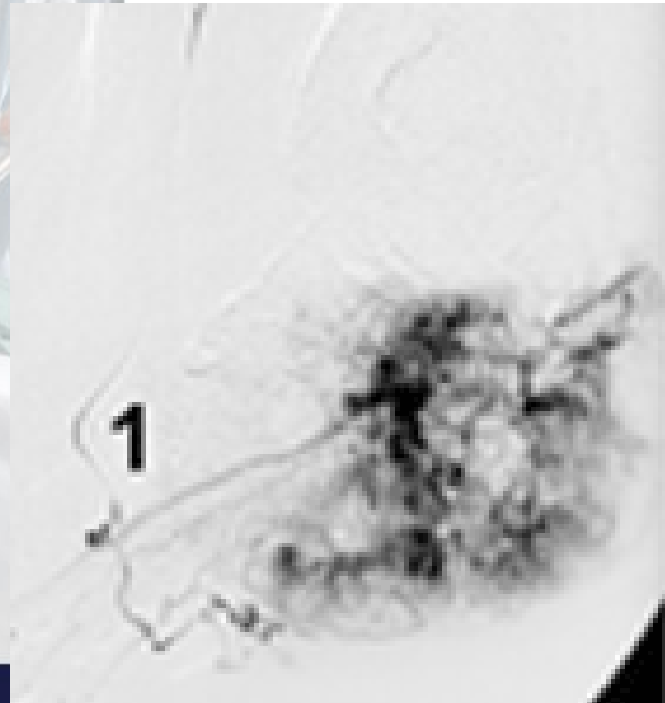
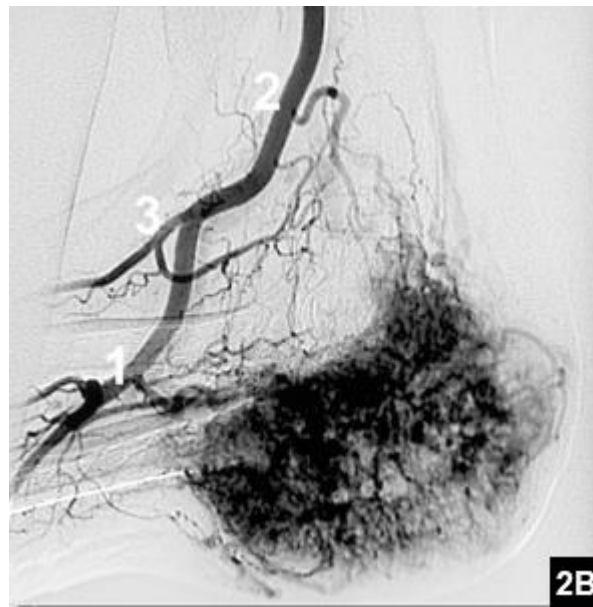


TUMOR EMBOLIZATION

- CAN BE PALLIATIVE OR PERFORMED PRE-OPERATIVELY TO MINIMIZE INTRA-OPERATIVE BLOOD LOSS
- COMMON EMBOLIC AGENTS INCLUDE PVA, GELFOAM AND GLUE/ONYX

RCC METASTASIS





For more information please contact



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