

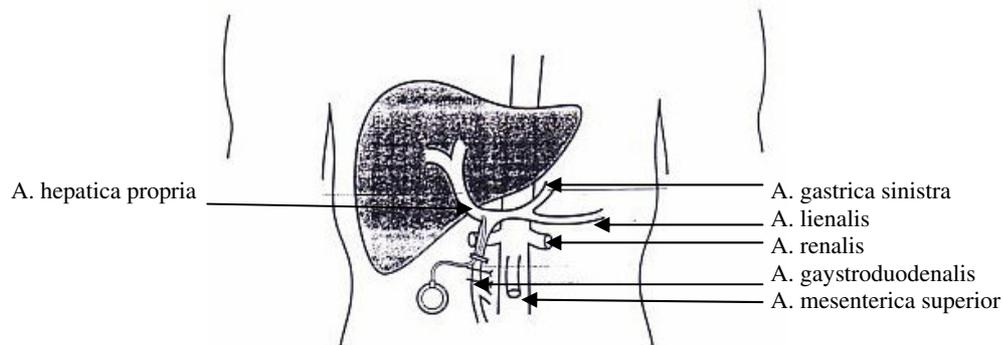
Intraarterial Portsystem for Regional Intraarterial Chemotherapy

Indications:

- regional intraarterial chemotherapy of hepatic metastases of gastrointestinal neoplasms
- malignant primary liver tumors
- pancreatic carcinoma
- head and neck tumors

Techniques:

- (hepatic treatment as example)
- When the procedure is indicated, preoperative angiographic assessment of liver perfusion relationships is mandatory (mesenterico-coeliacography? atypical hepatic vascular anatomy?)
 - Next laparotomy and demonstration of arterial blood supply to the liver (A.hepatica propria and A. hepatica communis, A. gastroduodenalis, where necessary A.hepatica dextra from A. mesenterica sup. , A. hepatica sinistra from A. gastrica sinistra etc.)
 - Ligation of the A. gastrica dextra and A. gastroduodenalis respectively.
 - Implantation of port/catheter system (fixation via vessel ligation or vessel purse-string suture)
 - Cave of accessory or atypical hepatic artery
 - Next intraoperative assessment of hepatic perfusion is performed by injecting either methylene blue or fluorescein dyes.
 - Connection of catheter to port chamber and fixation in a subcutaneous recess with several fascial sutures.
 - Filling of system with heparinized physiologic saline solution



Port Puncture:

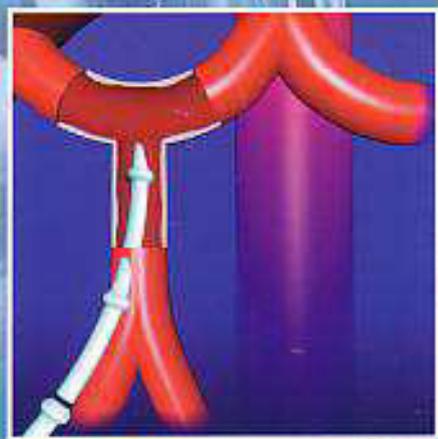
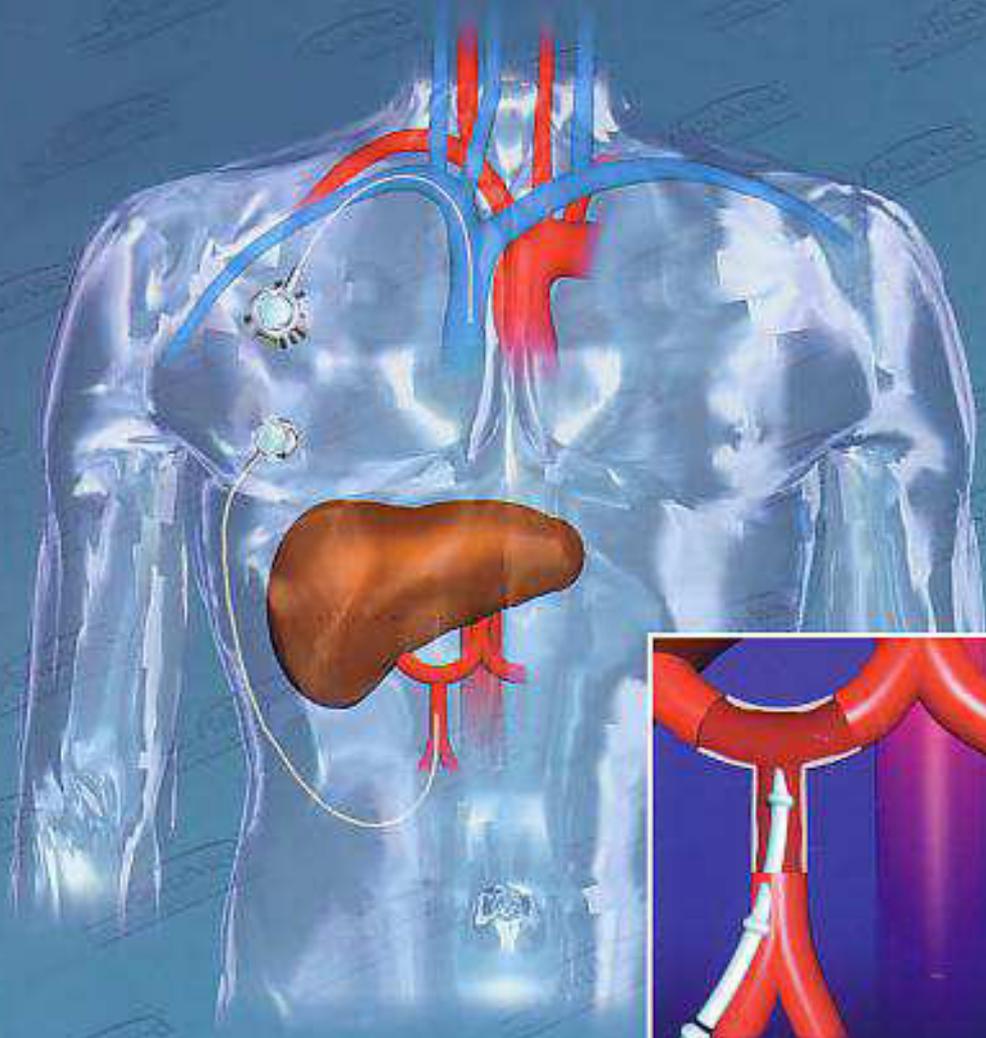
1. Using sterile technique the port chamber is punctured using non-coring SFN.needles
2. The port system is flushed with heparinized physiologic saline solution.
3. Commence chemotherapy by connecting to a perfusor suitable for intraarterial applications.
4. Upon completion of chemotherapy, remove needle after heparin block. Band-aid dressing.
5. Continuous treatment with thrombocyte aggregation inhibitors (100 mg of acetylsalicylic acid) to prevent catheter thrombosis.

Specifics:

The port system must be checked with contrast media (port angiography) before every cycle of chemotherapy to exclude extravasation or arterial dissection.

Problems:

- blood drawing from port not possible
- danger of septic complications when port system infected (hepatic abscess)
- possible gastric ulceration if port circulation includes gastric perfusion areas (when necessary vessel ligation or embolization, gastric medications)
- bile duct/arterial fistula formation



Arterielle Port-Implantation
arterial Port-Implantation



Leberperfusion
liver perfusion



Oberbauchperfusion
Truncus coeliacus perfusion