

INTRA-ARTERIAL (IA) CHEMOTHERAPY FOR HEAD AND NECK TUMORS

Information for patients

Introduction

- Head and neck tumor is not an uncommon malignancy in Hong Kong. The majority of them present with advanced stage disease and only a portion of them could benefit from curative surgical treatment.
- IA chemotherapy is a method of delivering chemotherapeutic agent directly into the arteries supplying the tumor. It is an alternative or adjuvant measure to unresectable head and neck tumor. It is highly effective for local disease control with benefit of preservation of organ and function. It may be curative or palliative.
- This procedure is performed by radiologists with special training in interventional radiology in the Department of Radiology under image guidance.
- Depending on the clinical condition and tumor response, IA chemotherapy could be performed once every week for up to 4 consecutive weeks and it could be performed with concomitant radiation therapy.

Procedure

- Before the procedure, you will be given fluid through the intravenous line and medications to relieve vomiting.
- The procedure is performed under local anaesthesia. The femoral artery at groin region is punctured for arterial access.
- Angiography is performed for demonstration of vascular structures. The arteries supplying the tumor are selectively catheterized with the tip close to the origin of the dominant artery supplying the tumor. Sometimes superselective catheterization with a smaller catheter through the original catheter may be required for small-sized vessels. The chemotherapeutic agent is then injected through the catheter. A neutralizing agent is given at the same time through the intravenous line to reduce the side effects of the chemotherapeutic agent.
- The procedure usually requires 1 to 2 hours
- During the procedure, your vital signs are closely monitored.
- After the procedure, your vital signs, urine output, liver and renal function will be monitored. Diet can be resumed if the vital signs are stable.
- You may feel nausea, headache, pain in the head and neck region, or fever in the first few days. You will be given antibiotics if there is clinical sign of infection. Drugs will be given for vomiting and pain.
- You will be discharged after completing the protocol for chemotherapy and/or concomitant radiotherapy if your blood results are stable. You will then be followed up in the out-patient clinics and with imaging studies (like CT or MRI).

Potential Complications

- Drop in neutrophils count, platelet count and haemoglobin level
- Fever, nausea, vomiting, fatigue
- Regional loss of hair

- Mucositis (inflammation of the inner surface in mouth and nose)
- Damage of renal function
- Central nervous system dysfunction
- Complications relating to groin arterial puncture and catheter manipulation, such as big clot formation, arterial injury, occlusion of arteries in the lower limb: Uncommon.
- Procedure related death is rare.
- The overall adverse reactions related to iodine-base non-ionic contrast medium is below 0.7%. The mortality due to reaction to non-ionic contrast medium is below 1 in 250000.

Disclaimer

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