



P4:101

Features of central venous catheterization in patients with Askin tumor

Maxim Rykov¹, Elena Gyokova¹

¹) Institute of Pediatric Oncology, Russian Federation

Background: Treatment of Askin tumor in children - PNET thoraco-pulmonary zone - in the first stage involves holding at least five cycles of chemotherapy requiring the central vein catheterization in the first hours after the diagnosis. In this case, the anatomy of the chest is often changed because of the prevalence of tumor, making the subclavian vein puncture even more dangerous. Implanted venous port is often not possible due to contraindications for general anesthesia. The optimal choice - catheterization of the internal jugular vein on the affected side, it is easier and safer to the femoral vein catheterization.

Materials and Methods: From 2010 to 2012, we observed 15 patients with Askin tumor at the age of 6 to 17 years. In 7 (46.6%) of these tumor-induced processes that use mediastinal shift, sprouting dome diaphragm, pushed aside and squeezed the subclavian artery and vein. These patients were performed catheterization of the internal jugular vein on the affected side after the preliminary layout with ultrasound. As a solution to close the catheters between their uses, we use a product containing tauolidine, prevents the formation of biofilm on the inner surface of the catheter. After the 2 courses of chemotherapy (including combinations of Doxorubicin, Vincristine, Cyclophosphamide and Etoposide with

Ifosfamide) the significant regression process and the stabilization of the state were achieved providing these patients with long-term vascular access.

Results: no cases of hemo-pneumothorax, trauma adjacent common carotid artery and other anatomical structures, catheter-related infections were observed. In 3 (20%) patients developed catheter thrombosis, which was successfully resolved by adding to it 3 ml of urokinase with exposure of 15 minutes.

Conclusion: the internal jugular vein catheterization in patients with contraindications to implantation of subcutaneous venous ports and a high risk of complications when trying to subclavian vein allows to initiate neoadjuvant chemotherapy in minor time. With virtually no risk of complications that can delay the performance of significant treatment. The use of tauolidine between using a catheter allows to avoid infection. However, the presence of an external central venous catheter requires permanent location of children in hospital.

E-mail (main author): wordex2006@rambler.ru