Totally Implantable Venous Access Device for Long Term Parenteral Nutrition in a Patient with High Output Enterocutaneous Fistula Due to Advanced Malignancy

Authors: Puneet Goyal, Aarti Agarwal

Abstract: Background and Objective: Nutritional support is an integral part of palliative care of advanced non-resectable abdominal malignancy patients, though is frequently neglected aspect. Non-Healing high output Entero-cutaneous fistulas sometimes require long term parenteral nutrition, to take care of catabolism and replacement of nutrients. We present a case of inoperable pancreatic malignancy with high output entero-cutaneous fistula, which was provided parenteral nutritional support with the use of Totally Implantable Venous Access Device (TIVAD). Method and Results: 55 year old man diagnosed with carcinoma pancreas had developed high entero-cutaneous fistula. His tumor was found to be inoperable and was on total parenteral nutrition through routine central line. This line was difficult to maintain as he required it for a long term TPN. He was planned to undergo Totally Implantable Venous Access Device (TIVAD) implantation. 8Fr single lumen catheter with Groshong non-return Valve (Bard Access Systems, Inc. USA) was inserted through right internal jugular vein, under fluoroscopic guidance. The catheter was tunneled subcutaneously and brought towards infraclavicular pocket, cut at appropriate length and connected to port and locked. Port was sutured in floor of pocket. Free flow of blood aspirated, flushed with heparinized saline. There was no kink observed in entire length of catheter under fluoroscopy. Skin over infraclavicular pocket was sutured. Long term catheter care and associated risks were explained to patient and relatives. Patient continued to receive total parenteral nutrition as well as other supportive therapy though TIVAD for next 6 weeks, till his demise. Conclusion: TIVADs are standard of care for long term venous access solutions in cancer patients requiring chemotherapy. In this case, we extended its use for providing parenteral nutrition and other supportive therapy. TIVADs can be implanted in advanced cancer patients for providing venous access solution required for various palliative treatments and medications. This will help in improving quality of life and satisfaction amongst terminally ill cancer patients.

Keywords: parenteral nutrition, totally implantable venous access device, long term venous access, interventions in anesthesiology

Conference Title: ICAAPM 2017: International Conference on Anesthesia and Acute Pain Management

Conference Location : Dubai, United Arab Emirates

Conference Dates: November 24-25, 2017