

TREATMENT OF OVARIAN CACINOMA WITH P32

Radiocolloid P-32 can be used in the management of malignant effusions in special cases of carcinoma of the ovary. The diagnosis of malignancy either by biopsy or by demonstration of malignant cells in fluid is a requirement for treatment of ovarian carcinoma using colloidal P-32.

PATIENT PREPARATION

No preparation is necessary. Hospitalization is required if more than 30 mCi. are to be instilled.

MATERIALS

1. 1000 mL of saline solution
2. 50 cc. syringe
3. Tubing with male connectors on both ends.
4. 20 G spinal needle and 20 G needle
5. 3 way stopcock
6. IV tubing
7. 5 – 12 mCi colloidal chromic phosphate (P-32)

PROCEDURE

Under aseptic conditions a needle or polyethylene catheter is inserted in the abdominal cavity and following removal of the majority of the fluid present a radio-opaque material is administered. This radio-opaque material is used to determine what the distribution will be prior to instillation of the therapeutic dose. An x-ray of the cavity is obtained.

If there is no significant fluid in the abdomen, saline should first be introduced (500 – 1000 cc.) prior to introduction of contrast agent and x-ray evaluation of distribution and x-ray evaluation of distribution of the radio-opaque agent.

A system to administer the material directly from the shipping container is desired. See diagram below. This prevents excessive handling by personnel.

The P-32 is displaced by the saline solution. The P-32 is a bluish color and can be seen through the IV tubing. Approximately 500 mL of saline is instilled into the peritoneum after P-32 is administered. This improves distribution of the P-32. Observe for any leakage around the catheter.

Following administration of the P-32 radiocolloid, the patient should be instructed to move from one position to another for several hours to help achieve a more homogenous dispersion.

All materials used in this procedure should be treated as radioactive contaminated and store and promptly disposed after fifteen half-lives. P-32 is a pure beta-emitter, 1.70 meV and has a 14.2 day half-life.

The nurse should be advised to observe the wound and report any drainage to the nuclear medicine section. It is presumed that bandages and dressings are contaminated with radioactive (P-32) materials in these situations. It is the responsibility of the nuclear medicine section to collect contaminated dressing and/or supervise the changing of the dressing.

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