



TCK 43

KIT FOR THE PREPARATION OF ^{99m}Tc -EC (DIAGNOSTIC- FOR INTRAVENOUS USE)

The kit for the preparation of ^{99m}Tc -EC (Ethylene Dicycysteine diacid) is a three component kit and its preparation is based on transchelation method. On reconstituting the kit, as per specified recipe, ^{99m}Tc -EC solution formed is sterile, pyrogen free and suitable for i.v. administration.

^{99m}Tc -EC is used as renal tubular function imaging agent, which is a substitute of ^{131}I labelled Hippuran and ^{99m}Tc -MAG₃.

Advantages of ^{99m}Tc -EC over ^{131}I -Hippuran are

- ◆ Better radiation safety characteristics of ^{99m}Tc .
- ◆ Hospital radio pharmacy based preparation and hence better availability.

□ ^{99m}Tc -EC is used as renal function imaging agent for

- Estimation of renal transplant in terms of perfusion, secretion and excretion-aids in predicting early rejection of transplanted kidney.
- Assessment of surgical graft during perfusion phase.
- Follow up for functional assessment of renal transplant.

DESCRIPTION OF THE KIT

Kit consists of three components (vials)

Component-A : 40 mg of calcium/ sodium glucoheptonate and 0.1 mg of stannous chloride dihydrate in freeze dried form.

Component-B : 1 mg of ethylene dicycysteine in freeze-dried form.

Component-C : 1 ml of 0.5M sodium dihydrogen phosphate solution, pH 4-5.



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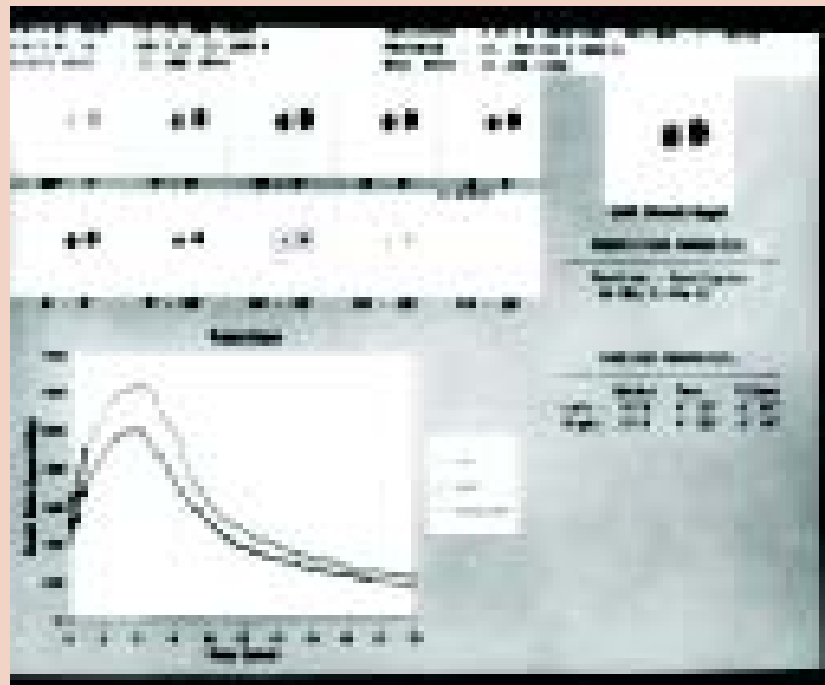
^{99m}Tc-EC Formulation *

1. Allow the kit vials to attain ambient temperature.
2. Add 2 ml of sterile sodium pertechnetate (Na^{99m}TcO₄) solution containing upto 50 mCi (1.85 GBq) to Component-A vial (reaction vial). Allow it to stand at room temperature for 10 min.
3. Add 1 ml of water for injection/saline to Component-B vial and mix well.
4. Aseptically transfer the contents of Component-B vial to Component-A vial (reaction vial) and heat in boiling water bath for 10 min.
5. Allow it to stand at room temperature for 5 min.
6. Add 0.5ml of Component-C to the reaction vial to adjust pH to ~ 7.
7. The preparation is now ready for use.

(*For actual formulation, follow Product Recipe)

DOSAGE AND ADMINISTRATION

The suggested dose range per patient for i.v. administration of ^{99m}Tc- EC is 3 mCi - 5mCi (111 MBq to 185 MBq) for renal tubular function imaging .



For placing the orders and further details please contact
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