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TCK 42

KIT FOR THE PREPARATION OF 99mTc-ECD

(DIAGNOSTIC-FOR INTRAVENOUS USE)

The kit for the preparation of ^{99m}Tc-ECD (Ethyl Cysteinate Dimer) is a two-component kit. On reconstituting the kit, as per specified recipe, ^{99m}Tc-ECD solution formed is sterile, pyrogen free and suitable for i.v. administration.

^{99m}Tc-ECD crosses the blood brain barrier and accumulates in the brain in proportion to regional blood flow. It exhibits good uptake and long retention in brain. The activity in facial muscles is cleared faster resulting in higher contrast image compared to ^{99m}Tc-HMPAO. ^{99m}Tc-ECD complex is stable in-vitro.

☐ 99mTc —ECD is used as brain imaging agent for

- Assessment of regional cerebral blood flow using SPECT.
- Mapping of cerebral perfusion.
- Useful in the study of blood flow disorders of brain like transient ischemic attack (TIA), stroke, epilepsy, dementia, migraine etc.
- Estimation of functional cerebral mass.

DESCRIPTION OF THE KIT

Kit consists of two components (vials)

Component-A: 1 mg of ECD, 0.3 mg of sodium EDTA, 20 mg of mannitol

and 60-75 μg of stannous chloride dihydrate in freeze

dried form.

Component-B: 1 ml of 0.02M phosphate bufer, pH 7-8.



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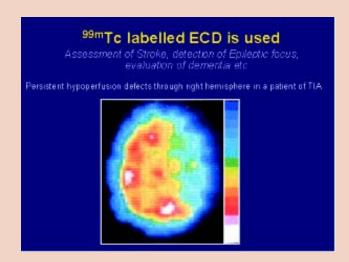
99mTc-ECD Formulation *

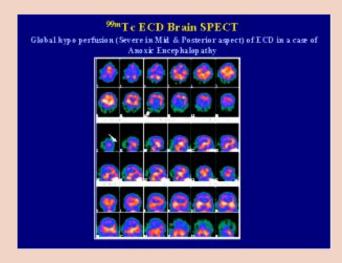
- 1. Allow the Component-A vial to attain ambient temperature.
- 2. Add 1ml of sterile sodium pertechnetate (Na^{99m}TcO₄) in 0.9% sodium chloride solution containing the required activity of ^{99m}Tc to the Component-B vial and mix well. This is called the reaction vial.
- 3. Dissolve the contents of Component-A vial in 1ml of sodium chloride solution, withdraw and immediately add to the reaction vial. Mix well.
- 4. Allow it to stand at room temperature for 30 min.
- 5. 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- ECD is 10 mCi - 20mCi (370 MBq to 740 MBq) for brain imaging .







For placing the orders and further details please contact Customer Support Services Cell (CSSC)

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