

In the 75th year of Azadi ka Amrit Mahotsav (AKAM), the Board of Radiation & Isotope Technology (BRIT) launched the radiopharmaceutical Thallium-201 chloride (Tl-201) for cardiac imaging studies towards early diagnosis of heart ailments. BRIT Regional Centre at Kolkata jointly with VECC, Kolkata, produced Tl-201 for the first time from the 30 MeV cyclotron CYCLON-30. Tl-201 chloride was recently approved for use in cardiac imaging by Radiopharmaceutical Committee, DAE. The Tl-201 patient doses were supplied to NH Rabindranath Tagore International Institute of Cardiac Sciences, Kolkata. Excellent feedback has been received from the hospital on the SPECT imaging performed in two patients for ischemia evaluation and viability assessment respectively. The Tl-201 produced by BRIT RC Kolkata reportedly showed good biodistribution with good cardiac uptake due to which excellent quality images could be obtained. Uptake of Tl-201 in the liver and soft tissues was low as compared to that of ^{99m}Tc-MIBI in the same patients. With this achievement, BRIT has reiterated its commitment to bring out more and more useful diagnostic and therapeutic radiopharmaceuticals at economical costs for the benefit of the suffering patients in the country.

Date : 20.12.2021

To,
Dr. Sankha Chattopadhyay
Scientific Officer-H
Regional Centre, BRIT
Medical Cyclotron facility
VECC, Babita Road
Chakgaria, Kolkata
West Bengal – 700094.

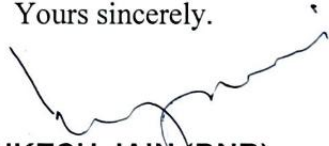
Sub : Feedback on Tl -201 from BRIT, Kolkata

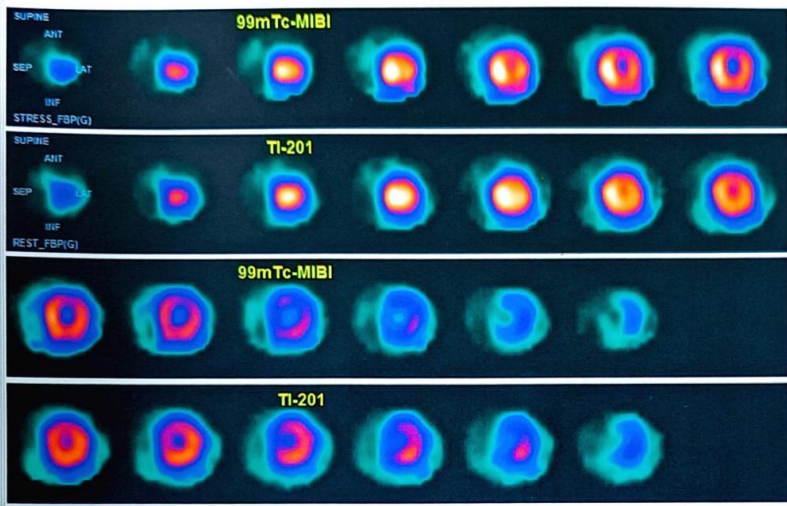
Respected Sir,

1. we are highly obliged and grateful to you for availing us Tl-201 for cardiac studies.
2. We conducted two cardiac studies (Rest-Stress on 18/12/202 for ischemia evaluation and rest only for viability assessment 20/12/202) using GE Discovery 670DR SPECT-CT scanner in patients referred to us for suspected coronary artery disease evaluation.
3. The Tl-201 produced by BRIT Kolkata shows good bio-distribution with excellent quality images, very good cardiac uptake, liver and other soft tissue uptake was low compared to ^{99m}Tc-MIBI performed on same patients (sharing the images as attachments).
4. I suggest the production of Tl-201 should be done on a regular and larger scale by BRIT and make it available for clinical utility. I also recommend other centers for clinical use of Tl-201.
5. We are looking forward to avail this radiopharmaceutical from BRIT, Kolkata on regular and commercial basis in near future.

Thanking you,

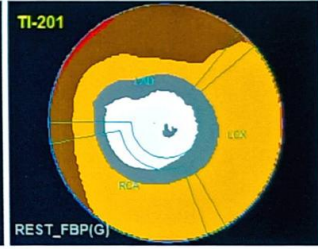
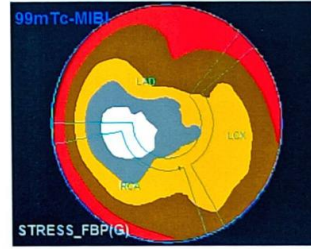
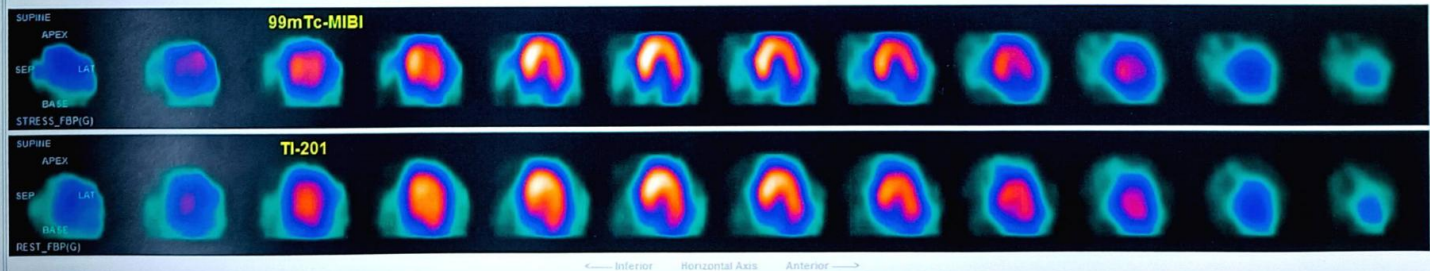
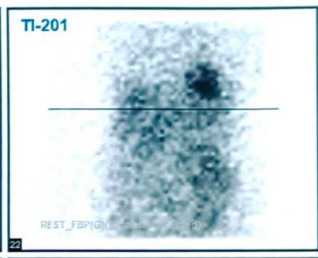
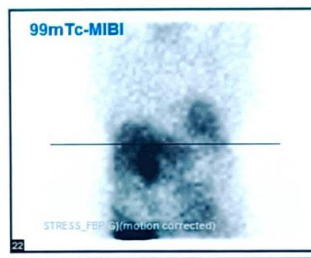
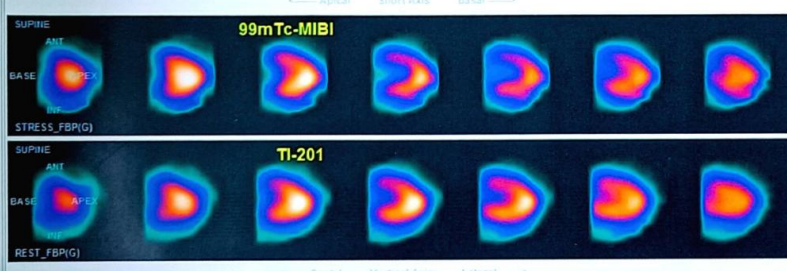
Yours sincerely,

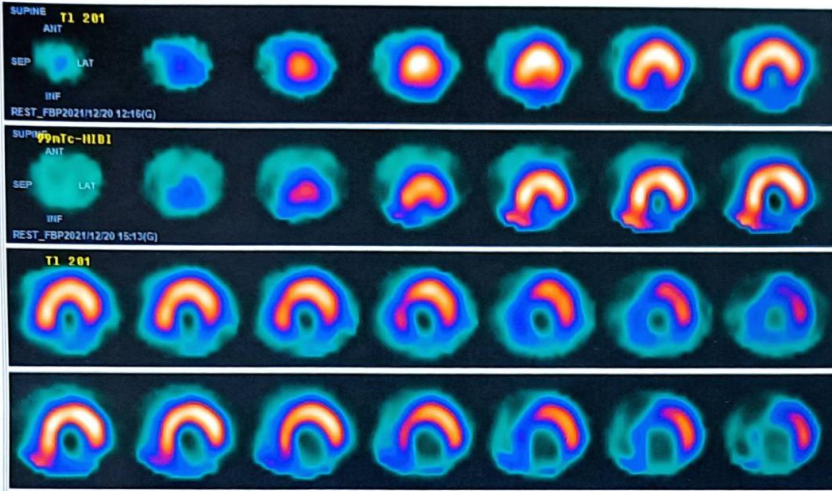

Dr. MUKESH JAIN (DNB)
HOD, CONSULTANT
NUCLEAR MEDICINE



99mTc-MIBI
STRESS_FBP(G)
Date: 2021/12/18 15:07
SA Pixel Size: 6.80mm
SA Thickness: 6.80mm
Recon: FBP/Bw/0.4/10

TI-201
REST_FBP(G)
Date: 2021/12/18 12:52
SA Pixel Size: 6.80mm
SA Thickness: 6.80mm
Recon: FBP/Bw/0.3/10





REST_FBP2021/12/20 12:16(G)

Date: 2021/12/20 12:16

SA Pixel Size: 6.80mm

SA Thickness: 6.80mm

Recon: FBP/Bw/0.3/10

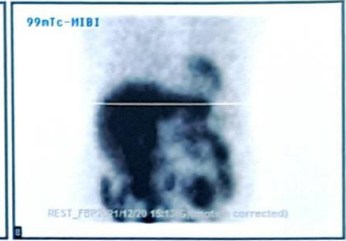
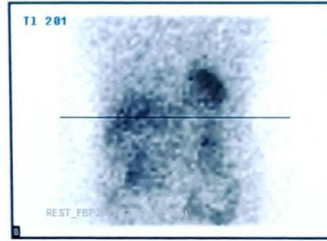
REST_FBP2021/12/20 15:13(G)

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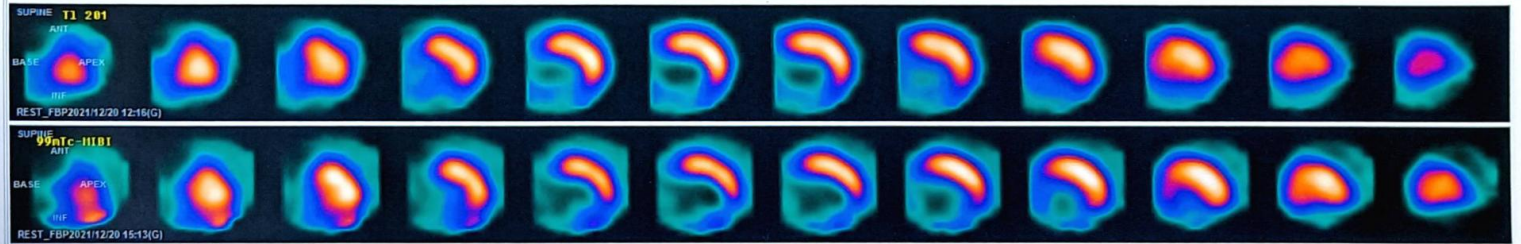
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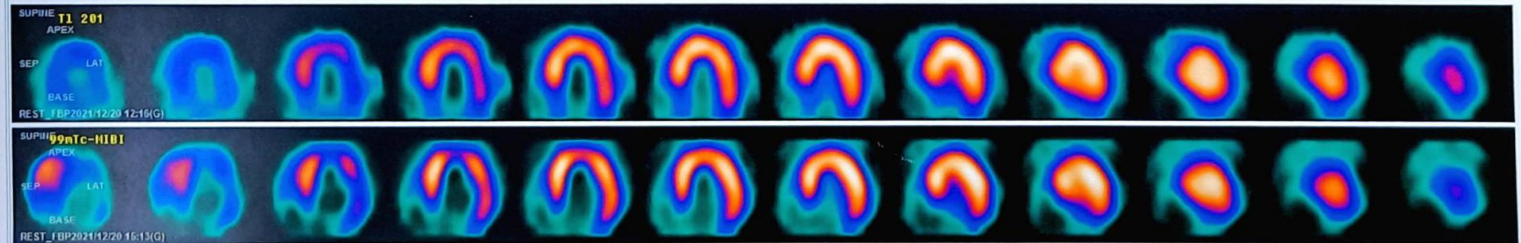
Recon: FBP/Bw/0.4/10



← Apical Short Axis Basal →



← Septal Vertical Axis Lateral →



← Inferior Horizontal Axis Anterior →