Abstract

Title: The Use of IV Iodinated Contrast in Whole Body PET-CT, how could we optimize it?

Negri Jacopo[1], Morbiducci Jarno[1], Iozzelli Andrea[1], Sampaolesi Davide[2], Oncini Luigi[1]

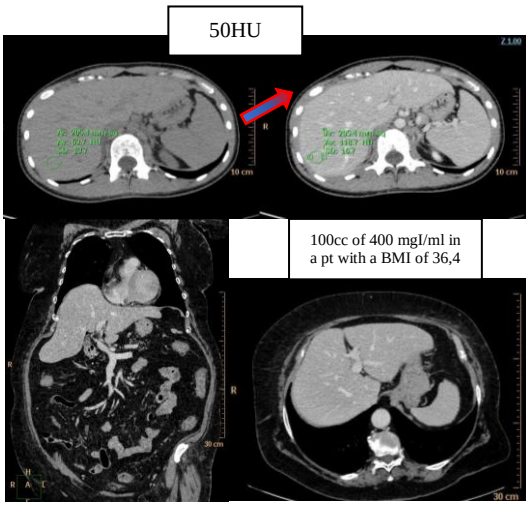
[1]Department of Radiology, Macerata's Hospital, ITALY
[2]Department of Radiology, Civitanova Marche's Hospital, ITALY

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I. Abstract

In the present study we investigate how to optimize the total amount of Iodinated Contrast in Whole Body CT. According to recent studies Iodinated Contrast can increase the radiation damage as well as increase the likelihood of CIN (Contrast Induced Nephropathy). It is imperative to find a practical and easy way to choose the total amount of Iodinated Contrast on Patient and examination basis. Since 2012 we have been investigating the use of BSA (Body Surface Area) as an accurate and easy method to calculate iodine grams for each patient: we used an Excel Scoresheet and Moesteller's formula corrected for different contrast concentrations. In the above file we incorporated different kind of ehnhancement to be able to increase subtle findings in difficult conditions. In our experience, based upon 1000 patients, we found that this system provided an homogeneous enhancement in whole body CT in different patients and with different concentration contrasts. We believe that this could be particularly helpful in CE FDG PETCT as in many cases IV contrast-enhanced FDG PET/CT has been found to be better than CE/CT or to unenhanced FDG PET/CT alone. The use of IV contrast in fact increases lesion cospicuity especially in mediastinal and pancreas tumours, so we believe that our method could be very useful for each PET/CT site which is using Iodinated IV contrast and is completely unaware on how to optimize it.

II. Results:



III. Reference:

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IV. Biography:

Negri is a radiographer expert in CT Protocol Optimization, permanent member of the Faculty at the Italian National Congress for Radiographers. He is a member of the EFRS expert network and authors of many books and lectures on CT and CT Radiation Dose Optimization.

V. Presenting author details



Full Name: Jacopo Negri
Contact number:+39 3404097034
Twitter account: https://twitter.com/JacopoNegri
Linked In account: www.linkedin.com/in/jacopo-negri-82385080
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