Chapter 4

4.1: Extension images:

Image(1) to member of research team in patient's table

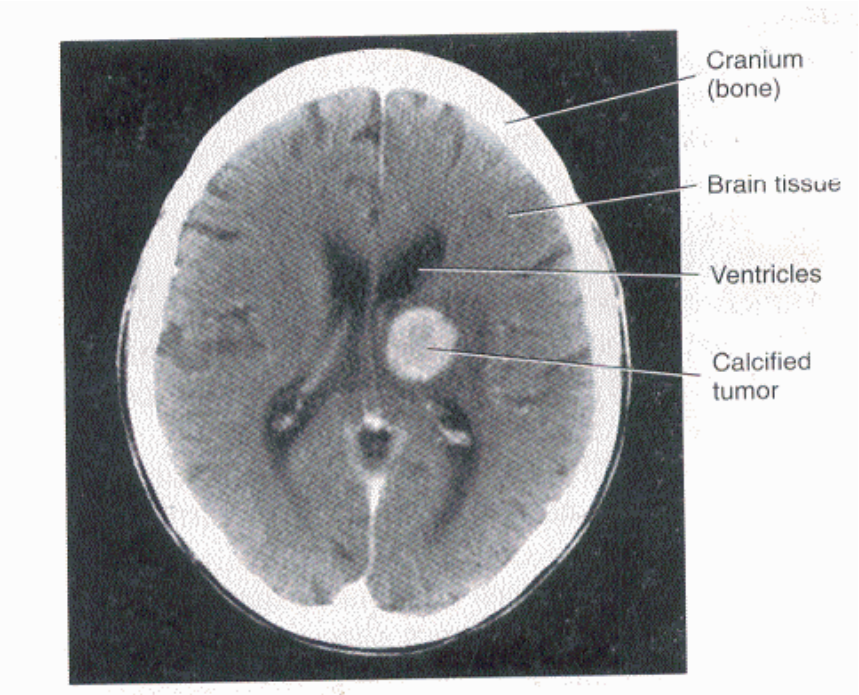
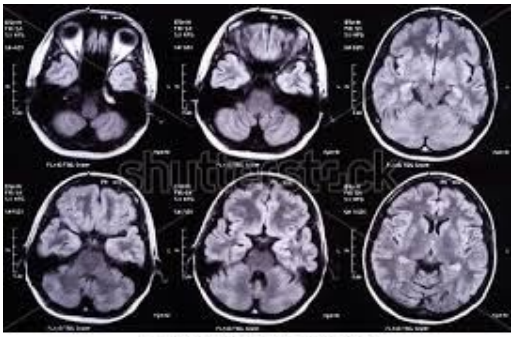


Image (2) CT image to the brain

Image(3) Data acquisition system(CT gantry)



Image(4) CT images to brain

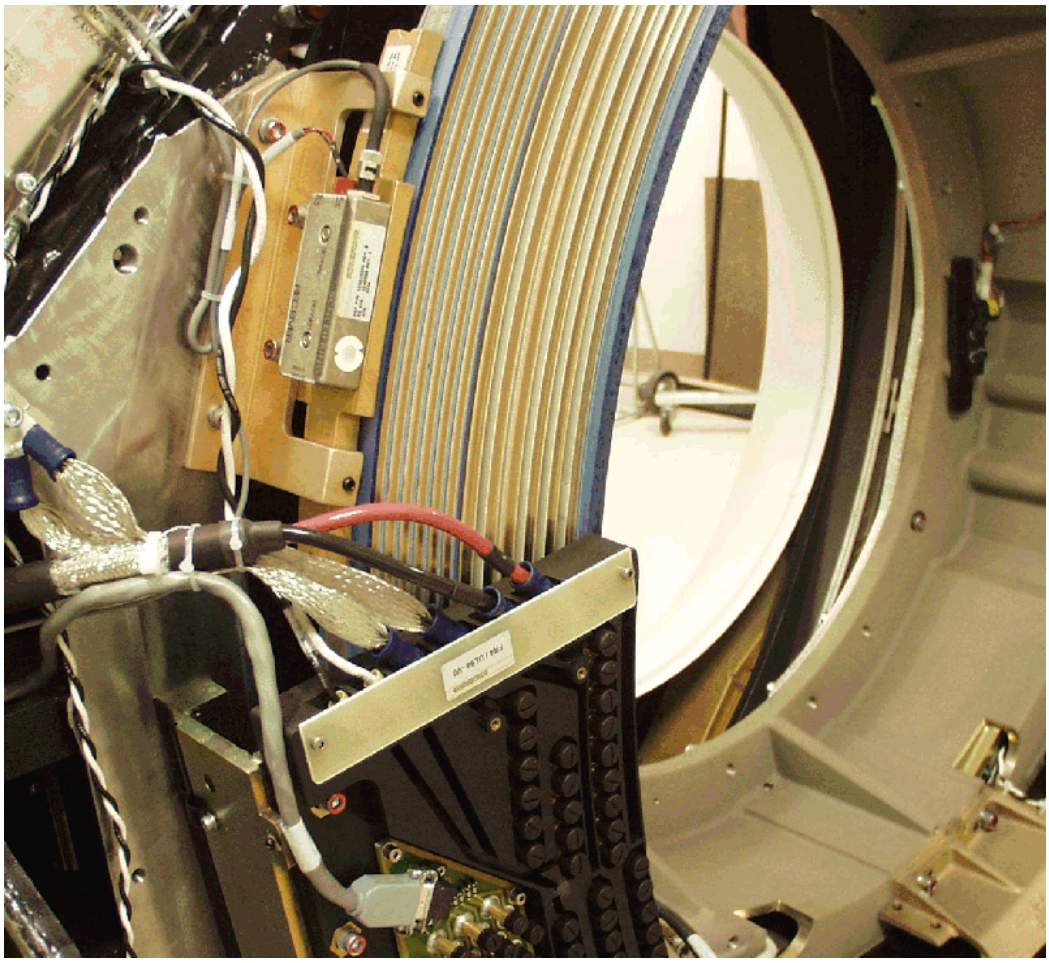


Image (5) slip ring

4.2: Conclusion

Computer Tomography is developed X-ray scan to get more informations about the organ or to scan organs conventional X-ray can't image it by cross-sectional imaging.

The physical principle to Computer Tomography calculate attenuation of X-ray through the body with differ mass attenuation coefficients for the different organs to the body.

The Computer Tomography mathematically used technique called reconstruction to generate 3-dimensional image from 2-dimensional image.

Computer Tomography scan consists of Data acquisition system (CT gantry)which transfer the data to the computer to process the data and reconstruct the CT image.

4.3: Recommendations:

In CT scan the rate of exposure to the radiation very large and that increase the probability to cancer, so we recommended concentrated the efforts and the researches to decrease the doses in CT scan.

4.4: Future studies:

Make standard to Sudanese children doses in CT scan by consider little weight and small size.

4.5:References :

Mahadevappa Mahesh,john C.Scatarige,Joseph Cooper and Eliot k.Fishman,AJR:177,December(2001).

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Morgan.Carlisle L.(1983) Basic Principles of Computed Tomography.Baltimore:University park press.

4 Herman, G. T., Fundamentals of computerized tomography: Image reconstruction from projection, 2nd edition, Springer, 2009