

**This research is dedicated to the soul of my Mother and
Father for their blessed prayers**

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2D	Two-dimensional
3D	Three-dimensional
CT	Computed tomography
FA	Flip angle
FE	Field (gradient) echo
FSE	Fast spin echo
FOV	Field of view
GE	General Electric
IMRI	Interventional magnetic resonance imaging
RF	Radio frequency
SAR	Specific absorption rate
SE	Spin echo
SNR	Signal to noise ratio
T	tesla
T1	T1-weighted

T2	T2-weighted
TA	acquisition time
TE	Echo time
TR	Repetition time
CSF	Cerebro-spinal fluid
CM	Contrast media
NMR	Nuclear Magnetic Resonance

Cervical spine X-RAYS & MR images were obtained from thirty patients in Military hospital , department of radiology in order to evaluate the plain

radiograph , & MRI images for intervertebral disc spaces & disc prolapsed of the cervical spine.

From the results of images, tables & analysis, the researcher finds the followings:

- Mild different between male & female who had been examined
- Disc prolapsed & Spondylosis often affects the cervical spine in people at the age of 41-60.
- X-ray cannot detect disc herniation while MRI revealed them.by38% of cases.

- X-ray cannot detect disc bulge while MRI revealed them. by 3% of cases.
- Disc prolapsed can be detected by x-rays 20% & MRI 21%
- Spondylosis was significantly better by X-ray (32 %) than MRI (15%).
- Common site of disc degeneration seen at C3 / C6

In conclusion, both X-ray & MRI modalities are important in the evaluation of intervertebral disc spaces & disc prolapsed in the cervical spine .

أجريت هذه الدراسة بالسلاح الطبي امدرمان -قسم الأشعة التشخيصية ومركز الرنين المغنطيسي والهدف من هذه الدراسة المقارنة بين فحوصات الأشعة Plain x-ray السينية

والرنين المغنطيسي MRI لتقييم المسافات بين الفقرات العنقية والانزلاق الغضروفي وكانت عدد الحالات التي أجريت فيها الدراسة ثلاثون حالة.

وبعد الدراسة والتحليل وجد الآتي:

- من حيث النوع لا يوجد اختلاف كبير بين الذكور والإناث
- من حيث العمر وجد ان اكبر تردد في الفئة العمرية (41-60)
- من حيث المقارنة بين الأشعة السينية والرنين المغنطيسي وجد ان 38% من الحالات أظهرت disc herniation بالرنين المغنطيسي بينما لم تظهر شئ بالأشعة السينية

وبالنسبة disc pulge فإنه لم يتبين له اثر فى الأشعة السينية بينما تم تحديده بواسطة

الرنين المغناطيسي بنسبة 3%

- disc prolapsed ظهر بنسبة متقاربة (MRI 13% -Plain x-ray 16%)

- حالات Spodylosis اكثر وضوحا بالأشعة السينية عنها بالرنين المغناطيسي

إلى 15% بنسبة 32%

- اكثر حالات disc degenerative شيوعا في المنطقة بين C3-C6

وفى الختام لوحظ أهمية كلا الفحصين الأشعة السينية والرنين المغناطيسي لتقييم

المسافات والانزلاق الغضروفي بين الفقرات العنقية .

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