Abs[redacted]

The following thesis is about an assessment of sub mucosal invasion for rectal carcinoma using CT . It has been carried out in 50 patients presented with ca. rectum , the summation of CT slice thickness taken to drive the tumor extension in sub mucosal as well the tumor size has been determine together with a CT number , histopathology and patient demography .The collected data has been analyzed using excel and it revealed that : the rectal carcinoma is predominant among male relative to female and the most susceptible segment of colon for carcinogenesis is the rectum , while the common histological type of rectal carcinoma is the Adenocarcinoma in contrast with other types. And the CT scan revealed that the adenocarcinoma has an average CT number of 41.5 ± St. Dev 0.626062 .The study also revealed that that the high incidence of rectal carcinoma was in people were smoking , and high incidence of rectal carcinoma was in Khartoum , while that the maximum affected age with rectal carcinoma were the age between (70 -80 years) . The study revealed that there is a correlation between off filed size in cm and sub mucosal extension in cm. while the correlation between the tumor size and age was so weak (R^2 = 0.026), also R^2 = 0.718 between the sub mucosal extension in cm and tumor size in cm

الخلاصة

تهدف هذه الدراسة إلى تقييم غزو سرطان المستقيم للطبقة تحت المخاطية بواسطة الاشعة المقطعية للمقارنة مع ملائمة الحقل الاشعاعي العلاجي . أجريت الدراسة على 50 مريضا , حيث تم جمع سمك صورة الاشعة المقطعية ورقم الاشعة المقطعية (CT.NO) لتحديد غزو السرطان تحت الطبقة المخاطية وحجم الورم وكذلك ديموقرافية المريض .

تم تحليل البيانات بواسطة برنامج إكسل والذي أوضح ان سرطان المستقيم يسود في الرجال بنسبة 62% مقارنة بالنساء وأكثر مقاطع القولون اصابة بالسرطان هو المستقيم بنسبة 52% يليه المستقيم السيني بنسبة 48%. كما أوضحت الدراسة أن نوعية السرطان الغدي أكثر شيوعا ويصيب المستقيم من القولون بنسبة 60% مقارنة بالسرطان الحلمي والسرطان الحرشفي و leomyocarcoma بنسب 22% و 10% و 8% على التوالي . بينما أوضحت الأشعة المقطعية أن السرطان الغدي ذو رقم أشعة مقطعية (CT.NO) قدره 41.5± 0.62 أكثر منه في السرطان الحلمي والسرطان الحرشفي و leomyocarcoma والذي قدره 37.6±0.50 و 36.6± 2.07و 37.5 ± 0.57على التوالي .

أوضحت الدراسة أن سرطان المستقيم يسود في المدخنين بنسبة 42% مقارنة بال snuffبنسبة 28% , كما أوضح التوزيع الجغرافي أن سرطان المستقيم يمثل بكل من

ولاية الخرطوم 50% , غرب السودان 24% , ولاية الجزيرة 10% ونسب بسيطة في بقية الولايات . وأن اكتر الفئات العمرية إصابة بسرطان المستقيم مابين 70- 80 سنة . كما أوضحت الدراسة ان العلاقة بين مؤشر كتلة الجسم والعمر ضعيفة بمعامل إرتباط قدره 0.007 , كما أن هناك علاقة طردية بين حجم المساحة خارج الحقل الاشعاعي العلاجي والغزو تحت الغشاء المخاطي تتبع للعلاقة من نوع $Y= 0.506x - 0.558$ حيث $\times$ تشير إلى إمتداد الغزو السرطاني تحت الغشاء المخاطي و Y تشير إلى حجم المساحة خارج الحقل الاشعاعي العلاجي .كما أوضحت الدراسة أن العلاقة بين حجم الورم والعمر ضعيفة بمعامل إرتباط قدره $R^2 = 0.026$, كما أن هناك علاقة طردية بين حجم الورم والغزو تحت الغشاء المخاطي بمعامل إرتباط قدره $R^2 = 0.718$ مؤكدة أن زيادة حجم الورم تؤدي الى زيادة الغزو تحت الغشاء المخاطي.

This thesis would be incomplete without a mention of the support given me by my husband Atif who kept my spirits up. Without his lifting me up, I doubt it should ever have been completed.

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