

Dedication

**To my parents for their life
long love and encouragement.**

**To my sisters and brother,
whose love, support and
people make every thing
worth while.**

**To my friends and all people
that I love, whose they
support is the foundation on
which I pursue my academic
aspiration.**

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الخلاصة

أجريت هذه الدراسة في السودان (مستشفى العلاج بالأشعة والطب النووي - الخرطوم) لتقييم فعالية فحص الرشف بالإبر الدقية للخلايا (FNAC) في تشخيص أورام الغدة الدرقية مقارنة بالفحص النسيجي بالسودان، وأيضاً لتقييم وتحسين جودة الفحص الرشف بالإبر الدقية للخلايا (FNAC) وذلك بمقارنة بين الأصباغ المستخدمة بالفحص (صبغة البابينكول - صبغة الهارس هيماتوكسلين - صبغة المايكروند جيمسا) وذلك للفترة (من ديسمبر 2004 - ديسمبر 2005). وقد أجري هذا البحث على 108 مريض. وجد أن فحص الرشف بالإبر الدقية (FNAC) له درجة حساسية (sensitivity) تبلغ 83.3% وخصوصية (specificity) تبلغ 100%. في التمييز ما بين الحالات الخبيثة والحميدة. ووجد أن نسبة حالات الغدة الدرقية الحميدة تبلغ 96.3% ونسبة حالات الغدة الدرقية الخبيثة تبلغ 3.7%.

وجد إن متوسط أعمار المرضى هذه الدراسة يبلغ 38.2 سنة، ومعدل المرض عند النساء أعلى نسبة من الرجال حيث تبلغ 87%، كما وجد إن المنطقة الغربية من السودان هي المنطقة الأكثر انتشاراً لأمراض الغدة الدرقية وتبلغ 35.2%، أما قبيلة البقارة فتتمثل القبيلة الأعلى إصابة بأمراض الغدة الدرقية وتبلغ 27.8%.

أظهرت صبغة البابينكول وصبغة الهارس هيماتوكسلين أفضل نتيجة جودة لصبغ الخلفية (background & deposit) حيث بلغ متوسط جودتهما (90.97%). وأنت صبغة المايكروند جيمسا في المرتبة الأخيرة وبلغ متوسط جودتها (79.31%).

وأظهرت صبغة البابينكول أفضل نتيجة جودة لصبغ نوي الخلايا (nuclear) حيث بلغ متوسط جودتها (94.03%)، وأنت صبغة الهارس هيماتوكسلين في المرتبة الثانية حيث بلغ متوسط جودتها (90.83%). وأنت صبغة المايكروند جيمسا في المرتبة الأخيرة، وبلغ متوسط جودتها (86.11%).

وأظهرت صبغة البابينكول أفضل نتيجة جودة لصبغ الهيول الخلوي (cytoplasm) وبلغ متوسط جودتها (93.61%)، وأنت صبغة الهارس هيماتوكسلين في المرتبة الثانية ومتوسط جودتها (88.75%). وأنت صبغة المايكروند جيمسا في المرتبة الأخيرة ومتوسط جودتها (83.61%).

عليه تأتي صبغة البابينكول في المرتبة الأولى من حيث الجودة العامة لصبغ الخلايا المأخوذة بالرشف بالإبر الدقية ثم تأتي صبغة الهارس هيماتوكسلين في المرتبة الثانية والمايكروند جيمسا في المرتبة الأخيرة وذلك حسب نتائج بحثنا المذكورة أعلاه.

Abstract

This study was carried out in the Sudan (Radiation & Isotopes center- Khartoum) to assess the value of FNAC in diagnosis of palpable thyroid masses and to improve quality of FNAC. A comparison was made between the main three cytological stains (Haematoxylin and Eosin (H&E) stain, Papanicolaou (Pap) stain and May-Grunwald Giemsa (MGG) stain). The study was carried on 108 patients during the period from (December 2004 to December 2005).

The study found that FNAC had sensitivity of 83.3% and specificity of 100%, in differentiation between malignant and benign thyroid palpable masses. The benign thyroid tumor conditions were 96.3 % (104 cases). While Malignant thyroid tumors were 3.7% (4cases).

The mean age for our study population was 38.2 years. The females were more than males and they account for 87% of cases. 27.8% of cases were from Bagara tribe Also the major residence was the west of Sudan (35.2%).

The Pap stain and H&E stain showed best stain quality concerning background and deposit .Both had total mean of 90.97% on the other hand MGG had total mean (79.3%).

The Pap stain showed best stain quality concerning nuclear staining with mean of (94.03%). H&E stain came next with mean of (90.83%) and MGG came last with mean of (86.11%).

The Pap stain showed best stain quality concerning cytoplasmic staining with mean of (93.61%) and H&E stain came next with mean of (88.75%). MGG came last one with mean of (83.61%).

The pap stain showed the best total quality for the staining of FNAC .H&E came next and MGG came last according to our results.

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