

Dedication

This work is dedicated to:

My parents

My husband

&

My daughter

My friends

&

Colleagues

With my love

Acknowledgments

Thank Allah for everything and for helping me in doing and completing this study.

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Abstract

This study was conducted in Elddamer, Atbra and Barbar hospitals in the River Nile State, during the period from Decemper 2009 to May 2010. This study aimed at detecting the cytomorphological changes of infertile couples using cytological techniques.

٧00 samples were collected randomly from couples, distributed as follow, 70 cervical smears from infertile wives and 30 cervical smears from fertile wives as control, their age ranged from 18 to 45 years, 70 seminal smears from infertile husbands and 30 seminal smears from fertile husbands as control their age ranged from 18 to 66 years. The smears were prepared, fixed and stained using Papanicolaou technique then examined under the light microscope. The cytological assessment of the study group revealed the following findings. Normal cervical smear were found in 4(5.7%) samples, 28(40%) had bacterial infection, 9(12.9%) had monilia infection, 16(22.9%) had inflammatory cells, 6(8.6%) showed atypical cells, 5(7.1%) had human papilloma virus, 2(2.9%) had herpes simplex virus. In husbands semen smears; normal semen smear found in 27(38.6%), 22(31.4%) had bacterial infection, 21(30%) had inflammatory cells, 36(51.4%) had abnormal sperm morphology and 34(48.6%) had normal sperm morphology with significant relation between infertility and cytological changes (P.value = 0.000).

In this study no significant relation between cytological changes and type of infertility, duration of infertility and contraceptive usage was found (P.value > 0.05).

In this study asignificant relation between ages of infertile husbands and the cytological changes was found (P.value < 0.05).

As conclusion of this study, the cytological changes in infertile couples were associated with infertility, and no relation between these changes and the type and the duration of infertility and contraceptive usage.

ملخص الاطروحة

أجريت هذه الدراسة في مستشفيات الدامر، عطبرة وبربر بولاية نهر النيل في الفترة من ديسمبر ٢٠٠٩ الى مايو ٢٠١٠. في الفترة من ديسمبر ٢٠٠٩ الى مايو ٢٠١٠. هدفت هذه الدراسة لمعرفة التغيرات الخلوية في الأزواج عديمي الخصوبة باستخدام التقنيات الخلوية. تم جمع مائتي عينة كان توزيعها كالاتي : سبعون عينة من خلايا عنق الرحم من زوجات عقيمات والثلاثون الباقية من زوجات منجبات كعينة ضابطة وكانت تتراوح أعمار الزوجات بين ١٨-٤٥ سنة. سبعون عينة من السائل المنوي من أزواج عقيمين والثلاثون الباقية من أزواج غير عقيمين وكانت تتراوح أعمارهم بين ١٨-٦٦ سنة. تم تحضير وتثبيت العينات ومن ثم صبغها باستخدام صبغة البابانيكولا وفحصها تحت المجهر الضوئي.

أظهرت هذه الدراسة البيانات الاتية :

افرازات عنق الرحم الطبيعية ٤ عينات بينما الحالات المرضية وجدت في ٦٦ عينة من مجموع العينات تم توزيعها كالاتي: ٢٨ (٤٠%) التهابات بكتيرية، ٩ (١٢.٩%) منها اصابة بفطر المبيضات، ١٦ (٢٢.٩%) تغيرات التهابية للخلايا، ٦ (٨.٦%) تغيرات لانمطية، ٥ (٧.١%) HPV، ٢ (٢.٩%) HSV.

اظهرت عينات السائل المنوي للأزواج النتائج الاتية :

مسحات السائل المنوي الطبيعية في ٢٧ (٣٨.٦%) عينة، التهابات بكتيرية ٢١ (٣١.٤%)، ٢٠ (٣٠%) التهابات خلوية، ٣٦ (٥١.٤%) اشكال غير طبيعية للحيوانات المنوية، ٣٤ (٤٨.٦%) حيوانات منوية ذات شكل طبيعي مع وجود علاقة ذات دلالة احصائية بين الأزواج عديمي الخصوبة والتغيرات الخلوية (P.value < 0.05).

وجدت الدراسة وجود علاقة ذات دلالة احصائية بين اعمار الأزواج عديمي الخصوبة والتغيرات الخلوية (P.value < 0.05).

خلصت الدراسة لوجود علاقة ذات دلالة احصائية بين عدم الخصوبة والتغيرات الخلوية عند الأزواج عديمي الخصوبة (P.value = 0.000)، وهذه العلاقة لا تعتمد على مدة ونوع عدم الخصوبة.

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