بسم الله الرحمن الرحيم

Sudan University of Sciences & Technology

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Ultrasound Findings of Urinary Bladder in Khat Chewer Yemeni Higher Education Students

نتائج فحص الموجات الصوتية للمثانة البولية لماضغي القات من طلاب التعليم العالي اليمنيين

Thesis submitted for partial fulfillment for the award of M.Sc. degree in Diagnostic Medical Ultrasound Imaging

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Abstract

Khat (pronounced "cot") is a natural stimulant from the Catha Edulis plant is cultivated in the Republic of Yemen and certain areas of East Africa. Khat produces a modest degree of euphoria and slight hypomania. It results in insomnia and appears to improve the users' alertness and concentration. That is why some students use it and believe that it enhances their memorization and preparations before examinations.

The main objective of this study was to determine ultrasound findings of urinary bladder in khat chewer Yemeni higher education students.

50 khat chewer student volunteers from higher education level were selected randomly serving as cases, and 20 non-khat chewer student volunteers from university level serving as control. All of them were taken ultrasound urinary bladder scan.

This study revealed high frequency of students who chewed khat was from Dhamar governorate and that may due to prevalence of khat agriculture in this governorate.

The study showed broad distribution of cases according to the post voiding residual urine and that reflected the normal variation which were stated in previous study, however this distribution was in the normal range of post voiding residual urine volume (less than 50ml) according to consensus recommendations from the United States Department of Health and Human Services, Agency for Health Care Policy and Research (AHCPR), which were published in 1992.

This study also revealed normal distribution of cases according the urinary bladder wall thickness which was in normal range(less than 3mm) using known standards of ultrasound imaging measurements except one case which showed thickened wall of urinary bladder which represents 2% of cases.

ملخص الدراسة

القات منشط طبيعي يُزرع في الجمهورية اليمنية وبعض دول شرق افريقيا، ويعطي القات متعاطيه درجة من النشوة وشي طفيف من الهوس ،كما يؤدي القات إلى الأرق ويحسن يقظة وتركيز المتعاطي له ولهذا السبب يتعاطاه الطلاب معتقدين أنه يحسن التذكر والتركيز والاستعداد قبل الامتحانات.

كان الهدف الرئيسي من الدراسة هو تحديد نتائج فحص الموجات الصوتية للمثانة البولية في ماضغي القات اليمنيين من طلبة التعليم العالي.

وقد تم اختيار 50 طالباً متطوعاً من طلبة التعليم العالي من ماضغي القات عشوائياً كحالات للدراسة و20 طالباً متطوعاً من طلبة التعليم العالي من غير الماضغين للقات كمرجعية واتخذت للجميع فحوصات الموجات الصوتية للمثانة البولية.

كشفت الدراسة عدد طلاب عالي من ماضغي القات من محافظة ذمار وقد يرجع ذلك إلى انتشار زراعة القات في هذه المحافظة.

وأظهرت الدراسة توزيعاً واسعاً للحالات وفقاً لحجم البول المتبقي في المثانة بعد التبول والتي عكست التباين الطبيعي الذي ذكر في دراسة سابقة، وقد كان هذا التوزيع في النطاق الطبيعي لحجم البول المتبقي بعد التبول (أقل من 50 مل) وفقاً لتوصيات وكالة الرعاية الصحية والبحوث بالولايات المتحدة الأمريكية والتي نشرت عام 1999م.

وأظهرت الدراسة كذلك توزيعاً طبيعياً للحالات وفقاً لسمك جدار المثانة البولية والذي كان في النطاق الطبيعي وفقاً للمعايير المستخدمة في القياسات لفحوص الموجات الصوتية(أقل من 3 مم) عدا حالة واحدة والتي تمثل 2% من العينة.

Dedication

With my love and appreciation I dedicate this thesis:-

To my mother's soul,

To my father for her endless support

To my love who always prays for me,

To anyone who ever taught me,

To my brothers and sisters,

To my colleagues and to all people that I do love and respect.

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