

بِسْمِ اللَّهِ الرَّحْمَنِ الرَّحِيمِ

قال تعالى :

يَسْأَلُونَكَ عَنِ الْخَمْرِ وَالْمَيْسِرِ ۖ قُلْ فِيهِمَا إِثْمٌ كَبِيرٌ وَمَنَافِعُ
لِلنَّاسِ وَإِثْمُهُمَا أَكْبَرُ مِنْ نَّفْعِهِمَا ۚ قُلْ وَيَسْأَلُونَكَ مَاذَا يُنْفِقُونَ
قُلِ الْعَفْوَ ۚ كَذَٰلِكَ يُبَيِّنُ اللَّهُ لَكُمْ الْآيَاتِ لَعَلَّكُمْ تَتَفَكَّرُونَ

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D e d i c a t i o n

To my father soul

Who uncompromising principle that guided my life

To my mother

For leading me into intellectual pursuits

To my brother and sisters

Thank you not enough for helping me

To my friend and colleagues

To the everyone from whom I learned

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Abstract

Alkaline phosphatase is a group of glycoprotein enzymes that act as phosphotransferases by hydrolyzing various types of monophosphate bond at alkaline pH, and used as marker of cholestasis in hepatocellular disease. There is association between vitamin D and damage of tissue accordingly the study aim to evaluate prediction value of alkaline phosphatase activity as early marker for cholestasis in vitamin D deficient hypertensive patients

A descriptive cross-section study carried out in different hospitals, eighty eight hypertensive patients were enrolled in this study 46 male and 42 female classify based on vitamin D results into three groups, group one normal vitamin D (>30 ng/ml) considered as control, group two vitamin D deficient (20 -30 ng/ml) and group three sever deficient vitamin D (<20 ng/ml). Alkaline phosphatase activity was measured kinetically and $\Delta A/\text{min}$ was calculated using spectrophotometer and vitamin D levels were estimated using competitive ELISA. Statistical analysis tests ANOVA, t-test done by using SPSS version 14.

Results of frequency showed gender variation are approximately equal (1:1)ratio male 52.3% and female 47.7%, also vitamin D deficient more common in female than male (81.09% female, 45.60% male), there was no association between BMI and vitamin D deficient female in contrast male with overweight male tend vitamin D deficient, ANOVA results showed there was no significant difference between ALP activity in both group of vitamin D deficient(D deficient and sever D deficient) when compare with normal vitamin D (P -value 0.215, P -value 0.575)respectively, in contrast overweight patients showed significant increase ALP activity.

Study concludes that, no change in ALP activity in vitamin D deficient hypertensive patients, and overweight subject tent to have increased ALP activity.

المستخلص

الفوسفاتيز القلوية (Alkaline phosphatases (ALP هو مجموعة من الإنزيمات التي تعمل بمثابة ناقلة الفسفات بواسطة تحليل أنواع مختلفة من الروابط أحادية الفوسفات في درجة الحموضة القلوية ، وتستخدم كعلامة للركود الصفراوي في أمراض الكبد.

هناك علاقة بين فيتامين (د) وتلف الأنسجة، وفقا لهذا تهدف هذه الدراسة إلى تقييم نشاط الفوسفاتيز القلوية كعلامة مبكرة بالنسبة للركود الصفراوي في مرضى ارتفاع ضغط الدم ناقصي فيتامين (د).

اجريت هذه الدراسة في مستشفيات مختلفة في ثمانية وثمانين من مرضى ارتفاع ضغط الدم 46 من الذكور و 42 من الإناث، صنفوا بناء على نتائج فيتامين (د) إلى ثلاث مجموعات ، مجموعة طبيعي فيتامين (د) (< 30 نانوغرام / مل)، و المجموعة الثانية فيتامين (د) ناقصة (20 - 30 نانوغرام / مل)، و المجموعة الثالثة نقص شديد فيتامين D (> 20 نانوغرام / مل). تم قياس نشاط الفوسفاتيز القلوية باستخدام مقياس الطيف الضوئي و قدرت مستويات فيتامين (د) باستخدام ELISA التنافسية. واجريت اختبارات التحليل الإحصائي باستخدام SPSS النسخة 14 .

وأظهرت النتائج تردد الجنسين متساوون تقريبا (1:1) نسبة الذكور 52.3 % والإناث 47.7 % ، كما تعاني الاناث من نقص فيتامين D أكثر من الذكور (81.09 % أنثى، 45.60 % ذكور) ، لا يوجد ارتباط بين مؤشر كتلة الجسم و فيتامين د، الذكور الذين يعانون من زيادة الوزن تميلون لنقص فيتامين (د) مقارنة بالاناث، كما أظهرت النتائج لم يكن هناك فرق كبير بين النشاط ALP في كل من مجموعتي نقص فيتامين (د) عند مقارنتها مع مجموعة التي لديها معدل طبيعي من فيتامين (د) (0.215 ، 0.575 P. value) على التوالي ، في المقابل أظهر المرضى الذين يعانون من زيادة الوزن زيادة كبيرة في نشاط الفوسفاتيز القلوية. وتتلخص الدراسة إلى أن قياس نشاط الفوسفاتيز القلوية غير مفيد كعلامة تنبؤية للركود الصفراوي في مرضى ارتفاع ضغط الدم ناقصي فيتامين (د)، وزيادة الوزن لديهم تؤدي الى زيادة النشاط الفوسفاتيز القلوية.

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