

## **RECOMMENDATIONS**

1. Measure the enzyme (Lp-PLA<sub>2</sub>) mass and genotype detection in parallel to activity measurement in the same study.
2. Further studies on larger number of patients and controls are recommended.

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## الملخص العربي

مرض الشريان التاجي هو عبارة عن حالة حيث تتكون الويحات داخل الشرايين التاجية المسؤولة عن تروية عضلة القلب بالدم الغني بالأوكسجين.

امراض الشرايين التاجية هي اشهر اشكال امراض القلب والاعوية الدموية والسبب الرئيسي لها هو تصلب الشرايين ، تصلب الشرايين هو مرض مزمن للشرايين المتوسطة والكبيرة الحجم والذي يتميز بتكون الويحات

الفسفوليبيز المرتبط بالبروتين الدهنى أ٢ والمعروف ايضا بأسم الاليسيتيل هيدروليز لعامل تفعيل الصفائح الدموية هو علامة بيولوجية حديثة تفرز من الخلايا الالتهابية المشاركة في وحة تصلب الشرايين وبالتالي فهو مخصص للغاية لالتهابات الاعوية الدموية وليس للالتهابات النظامية.

الفسفوليبيز المرتبط بالبروتين الدهنى أ٢ له تخصص واسع التأثير على الدهون الفوسفاتية المؤكسده وهذا يوضح التأثير المتخصص للفسفوليبيز المرتبط بالبروتين الدهنى أ٢ في التخلص من الدهون الفوسفاتية المؤكسده من البروتونات الدهنيه مع توليد الفوسفاتيديل كولين المنحل والاحماض الدهنية الحرة المؤكسده واللذان يعتبران وسطاء للالتهابات المسؤولة عن تصلب الشرايين.

مع ذلك، فإن الدراسة الحالية تهدف الى قياس نشاط إنزيم الفسفوليبيز المرتبط بالبروتين الدهنى أ٢ في مرضى يعانون من احتشاء عضلة القلب في الشعب المصرى ، لقد تم إختيار ٣٠ مريضاً مصرياً من قسم امراض القلب في المستشفى الرئيسى الجامعى بالاسكندرية يشملون ٦٦,٧% ذكور ، ٣٣,٣% اناث والذين تتراوح اعمارهم من ٣٥-٦١ عاماً بمتوسط قدره ٤٨ عاماً والذين يعانون من احتشاء عضلة القلب وهو ماتأكد بمخطط القلب الكهربائى وارتفاع إنزيمات القلب (كيناز الكرياتين العضلى الدماغى والتروبونين)، لقد تم استبعاد المرضى اللذين يعانون من داء السكرى وأمراض الكبد والكلى والغدة الدرقية للقضاء على اى علاقة بين نشاط الانزيم والامراض الاخرى غير أمراض الشريان التاجي.

كما تم اختيار ٢٠ من الافراد الاصحاء ويشملون ٧٠% ذكور، ٣٠% اناث حيث تتراوح اعمارهم من ٣٠-٦١ عاماً بمتوسط قدره ٤٤ عاماً وليس لهم تاريخ من الداء السكرى ، ارتفاع ضغط الدم والادوية كمجموعة تحكم .

تم جمع ٥ ملليلتر من الدم الوريدي من كل فرد عند دخوله المستشفى وتم تفريغه في انبوب عادى ثم تم تقسيم المصل الى جزئين : الاول تم استخدامه في قياس المعاملات الكيميائية الاتية ( كيناز الكرياتين الكلى – كيناز الكرياتين العضلى الدماغى – التروبونين – نازعه اكاتات و ناقله اسبارتاتى) بواسطة محلل كيمائى (تشخيص الرعاية الصحية سيمنز ، الولايات المتحدة الامريكية ما عدا البروتين المتفاعل ج ذو الحساسية المرتفعة تم قياسه بواسطة محلل كيمائى كوباس سى ٣١١).

اما الجزء الثانى من المصل فقد تم حفظه في درجة حرارة - ٨٠ درجة مئوية لقياس نشاط الانزيم بواسطة محلل كيمائى بيكمان كولتر.

تم جمع ٣ ملليلتر من الدم الوريدي لكل فرد بعد صيام ١٢ ساعة وتم تفريغها في انبوب عادى تم استخدام المصل لقياس صورة الدهون (الدهون الثلاثية – الكولستيرول – البروتونات الدهنية منخفضة الكثافة والبروتونات الدهنية عالية الكثافة ) والصيام السكر فى الدم بواسطة محلل كيمائى ( تشخيص الرعاية الصحية سيمنز، الولايات المتحدة الامريكية).

فى هذه الدراسة وجدنا انه ليس هناك ارتباط احصائي بين المرضى والاصحاء من حيث النوع ، السن والتخين. ومن ناحية اخرى وجدنا ارتباط احصائي بين المرضى والاصحاء من حيث ارتفاع ضغط الدم.

لقد توصلنا الي وجود زيادة في (الدهون الثلاثية – الكولستيرول – البروتونات الدهنية عالية الكثافة والصيام السكر فى الدم) في المرضى عن الاصحاء مع وجود ارتباط احصائي بين المجموعتين.

فى هذه الدراسة قمنا بقياس العديد من دلالات القلب ( كيناز الكرياتين الكلى – كيناز الكرياتين العضلى الدماغى – التروبونين – نازعه اكاتات - ناقله اسبارتاتى و البروتين المتفاعل ج ذو الحساسية المرتفعة) ووجدنا زيادة احصائية في المرضى عن الاصحاء.

فى دراستنا وجدنا ان معدل نشاط الانزيم الفوسفوليبياز المرتبط بالبروتين الدهنى أ<sub>2</sub> كان اعلى بين المرضى مقارنة مع الاصحاء وكان مرتبطا مع زيادة معدل حدوث احتشاء عضلة القلب .

لقد تحققنا من عدم وجود ارتباط احصائي بين نشاط الانزيم الفوسفوليبياز المرتبط بالبروتين الدهنى أ<sub>2</sub> والنوع، التدخين او ارتفاع ضغط الدم.

فى هذه الدراسة تحققنا من الارتباط الاحصائي بين نشاط الانزيم الفوسفوليبياز المرتبط بالبروتين الدهنى أ<sub>2</sub> ودلالات متعددة. ووجدنا ارتباط احصائي ايجابي بين نشاط الانزيم الفوسفوليبياز المرتبط بالبروتين الدهنى أ<sub>2</sub> و (الدهون الثلاثية و البروتونات الدهنية منخفضة الكثافة). لقد توصلنا الي عدم وجود ارتباط احصائي بين (السن، الكوليستيرول، كيناز الكرياتين الكلى – كيناز الكرياتين العضلى الدماغى – التروبونين – نازعه اكتات - ناقله اسبارتاتى و البروتين المتفاعل ج ذو الحساسية المرتفعة) ونشاط الانزيم الفوسفوليبياز المرتبط بالبروتين الدهنى أ<sub>2</sub> بين المرضى. كما كان هناك ارتباط احصائي عكسي بين نشاط الانزيم الفوسفوليبياز المرتبط بالبروتين الدهنى أ<sub>2</sub> و البروتونات الدهنية عالية الكثافة بين المرضى.

اخيرا لم نلاحظ اي ارتباط احصائي بين نشاط الانزيم الفوسفوليبياز المرتبط بالبروتين الدهنى أ<sub>2</sub> واي من الدلالات السابقة بين الاصحاء.

قياس نشاط انزيم الفسفوليبياز أ٢ المرتبط بالبروتين الدهنى فى مصل مرضى  
احتشاء عضلة القلب

رسالة علمية

مقدمة لكلية الطب – جامعة الإسكندرية  
إيفاءً جزئياً لشروط الحصول على درجة

الماجستير فى الباثولوجيا الإكلينيكية والكيميائية

مقدمة من

ياسمين نبيه إسماعيل زهران

بكالوريوس الطب والجراحة – جامعة الإسكندرية

كلية الطب  
جامعة الإسكندرية  
٢٠١٥

# قياس نشاط انزيم الفسفوليبياز ٢ المرتبط بالبروتين الدهنى فى مصلى مرضى احتشاء عضلة القلب

مقدمة من

ياسمين نبيه إسماعيل زهران

بكالوريوس الطب والجراحة- الإسكندرية

للحصول على درجة

الماجستير فى الباثولوجيا الإكلينيكية والكيميائية

موافقون

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لجنة المناقشة والحكم على الرسالة

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