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الملخص العربي

الربو الشعبي هو اضطراب التهابي مزمن في الشعب الهوائية يتميز بصعوبة تدفق الهواء الذي ينعكس كليا أو جزئيا مع أو بدون علاج محدد.ويعتبر التهاب الشعب الهوائية هو نتيجة للتفاعل بين مختلف الخلايا، والعناصر الخلوية والسيتوكينات. وفي الأفراد الأكثر استعدادا للإصابة بالربو الشعبي، قد يسبب التهاب الشعب الهوائية المتكرر إلى استمرار ضيق القصبة الهوائية، والذي يسبب أعراض منها الصفير وضيق التنفس، وضيق الصدر والسعال، وبخاصة في الليل أو بعد ممارسة الرياضة.

وقد جلبت السنوات الأخيرة الوعي المتزايد لآلية التأثير العميق لنظام المناعة الفطرية على تطوير الاستجابات المناعية. ومنها نظام المتمم الذي يعتبر جزءا لا يتجزأ من نظام المناعة الفطرية.

وفي هذه الدراسة، تم تقييم صورة المتمم من خلال قياس مستوى المتمم الثالث والرابع في محاولة لإلقاء الضوء على التغيرات المحتملة في قيمة المتمم أثناء نوبات الربو الحادة وذلك من خلال ٤٠ طفل مصابين بالربو الشعبي من مستشفى الأطفال الجامعي ببنها خلال الفترة من مايو ٢٠١٠ إلى ابريل ٢٠١١ و٢٠ طفل سليم لا يعانى من الربو الشعبي.

وفي دراستنا، شكلت المرضى الذكور ٥٥ ٪ من الحالات بينما شكلت المرضى الإناث ٤٥ ٪ من مرضانا مع متوسط عمري يبلغ ٦,٨± ٣,٠١.

وفيما يتعلق بالإقامة، فقد كانت معظم الحالات لدينا من الجانب الحضري حيث شكلت ٧٥٪ من المرضى بينما شكل المرضى من المناطق الريفية ٢٥ ٪. كما لاحظنا أن معظم الحالات كانت لدينا بالنسبة للآباء المتعلمين (٨٠ ٪ من الحالات) وتنتمي لأسر عدد أفرادها أكثر من٥ أفراد (٥٧ ٪ من الحالات). وهذا يتفق مع فرضية النظافة التي هي نظرية واحدة عن سبب زيادة انتشار مرض الربو في جميع أنحاء العالم.

وعن وجود تاريخ تأتب من عدمه ، فقد كان هناك تاريخ عائلي من الإيجابية في التأتب في ٥٧,٥ ٪ من الأطفال المصابين بالربو لدينا مع إيجابية التاريخ الشخصي للتأتب في ١٥ ٪ من الأطفال المصابين بالربو في شكل حساسية الجلد أو حساسية الأنف.

وقد صنفت الحالات إلى الخفيفة الثابتة، والمعتدلة والشديدة الثابتة وفقا لنهج تدريجي لإدارة الربو. وأظهرت النتائج أن ٧,٥ ٪ من الحالات لدينا تعاني من النوبات الخفيفة، ٥٢,٥٪ يعانون من النوبات المعتدلة و ٤٠ ٪ عانوا من النوبات الشديدة.

كذلك أظهرت النتائج أن هناك ارتفاع كبير في متوسط المتمم الثالث والرابع في أطفال الربو مقارنة بالأطفال العاديين الأصحاء، مع علاقة كبيرة بين شدة النوبة ومستويات المتمم الثالث والرابع (حيث كان متوسط المتمم الثالث ٩٥,٣٣ ±٣,٠٦ و١٦٦,٦٧ ± ٤١,٣٤ و ٢١١,٠٦ ± ٧,٣٦ في حالات الربو البسيطة والمتوسطة والشديدة على التوالي في حين كان متوسط المتمم الرابع ٢٧,٣ ±٢,٦٩ و٣٢,٩٧±٩,٨٧ و ٥٨,٣٥± ٧,٦٩ للنوبات البسيطة ، المتوسطة والشديدة على التوالي) .

كما أظهرت نتائج الدراسة أن هناك علاقة كبيرة وذات دلالة بين مستوى المتمم الرابع ومدة الربو بينما هناك زيادة في مستوى المتمم الثالث مع زيادة مدة الربو ولكنها لم تصل إلى حد وجود دلالة. بالإضافة إلى وجود علاقة ذات دلالة بين مستويات المتمم الثالث والرابع ومستوى التحكم في الربو (حيث كان متوسط مستوى المتمم الثالث ٢٠٣,٤ ± ١٠,٨ ومتوسط مستوى المتمم الرابع كان ٤٨,٢ ± ١٤ في الحالات غير المتحكم فيها بالمقارنة مع ١٠٦,١± ٠,٧و٢٦,١٥± ٢,٤ للمتمم الثالث والرابع على التوالي ، في الحالات الخاضعة للدراسة).

فيما يتعلق بالعد الايوزينى، فقد أظهرت الدراسة وجود ارتفاع كبير ذى دلالة في عدد الخلايا الايوزينية مع شدة نوبة الربو. أيضا، كان هناك ارتباط إيجابي بين مستويات المتمم الثالث والرابع والعد الايوزينى. وعلى النقيض، لم يكن هناك أي علاقة بين الجنس والعمر ومستوى المتمم الثالث والرابع ولكن كانت هناك علاقة كبيرة بين مستويات المتمم الثالث والرابع والمسكن فقد ارتفعا بشدة فى المرضى من المناطق الحضرية (حيث كان متوسط المتمم الثالث١٨٦,٢ ± ٤١,٠٤ وكان متوسط المتمم الرابع ٤٧,٣٥± ١٥,٢) بالمقارنة مع المرضى من المناطق الريفية (حيث كان متوسط المتمم الثالث ١٥٧,٧ ± ٤٧,٩٧ ومتوسط المتمم الرابع ٢٨,٧±٤).

ووفقا للمبادرة العالمية للربو(جينا ٢٠٠٩)، فقد صنفنا الحالات الى مجموعتين وكان ٢٥٪ من الحالات تحت السيطرة في حين أن ٧٥٪ من الأطفال ل كانوا يعانون من الربو غير المنضبط.

وفيما يتعلق بالأدوية المستخدمة فقد كانت معظم الحالات الخاضعة للدراسة (٦٠٪) تستخدم استنشاق موسعات الشعب والعلاج بالكورتيكوستيرويد المستنشق ومعظم الحالات غير المتحكم فيها (٢٦,٧ ٪) كانوا يستخدمون ثيوفيلين، موسعات الشعب قصيرة المفعول والكورتيكوستيرويد عن طريق الفم.

ومن هذه الدراسة نستنتج وجود ارتفاع فى نسبة المتمم الثالث والرابع بالدم فى الأطفال الذين يعانون من الربو الشعبى مع وجود علاقة وطيدة بين نسبة المتمم الثالث والرابع وشدة الربو الشعبى.

كما نوصى بإجراء دراسات أخرى على عدد أكبر من الأطفال الذين يعانون من الربو الشعبى لتقييم تأثير تحفيز المتمم على نوبات الربو وشدته ومدته.