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شبكة المعلومات الجامعية التوثيق الالكتروني والميكرو فيلم

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KASR ALAINY

DIAGNOSIS AND TREATMENT OF ROTAVIRUS INFECTION IN CHILDREN PRESENTING WITH DIARRHEA

Thesis

Submitted for fulfillment of the Master Degree (M.Sc.) in
Pediatrics
Faculty of Medicine – Cairo University

By

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**Faculty of Medicine
Cairo University
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بسم الله الرحمن الرحيم

قالوا سبحانك لا علم لنا إلا ما علمتنا
إنك أنت العليم الحكيم

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(البقرة 32)

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عنوان الرسالة: تشخيص وعلاج الإصابة بفيروس الروتا فى الأطفال الذين يعانون من الإسهال

الملخص:

إن فيروس الروتا يعتبر أكثر الكائنات المسببة للإسهال شيوعا فى
الأطفال على مستوى العالم كله، حيث أنه تقريبا يصيب كل طفل فى العالم قبل
عامه الخامس. و هو بكل الأحوال السبب الأهم والأوحد الذى يؤدى الى كم هائل
من إعتلالات و وفيات الأطفال على مستوى العالم. توضح هذه الدراسة نسبة
الإصابة بفيروس الروتا فى الأطفال الذين يعانون من الإسهال، و كيفية تشخيص
و علاج المرض، كما توضح كيفية الوقاية منه للحد من العبء الإقتصادى و
الصحى الناتج عن الإصابة بالفيروس.

و ترى اللجنة قبول البحث

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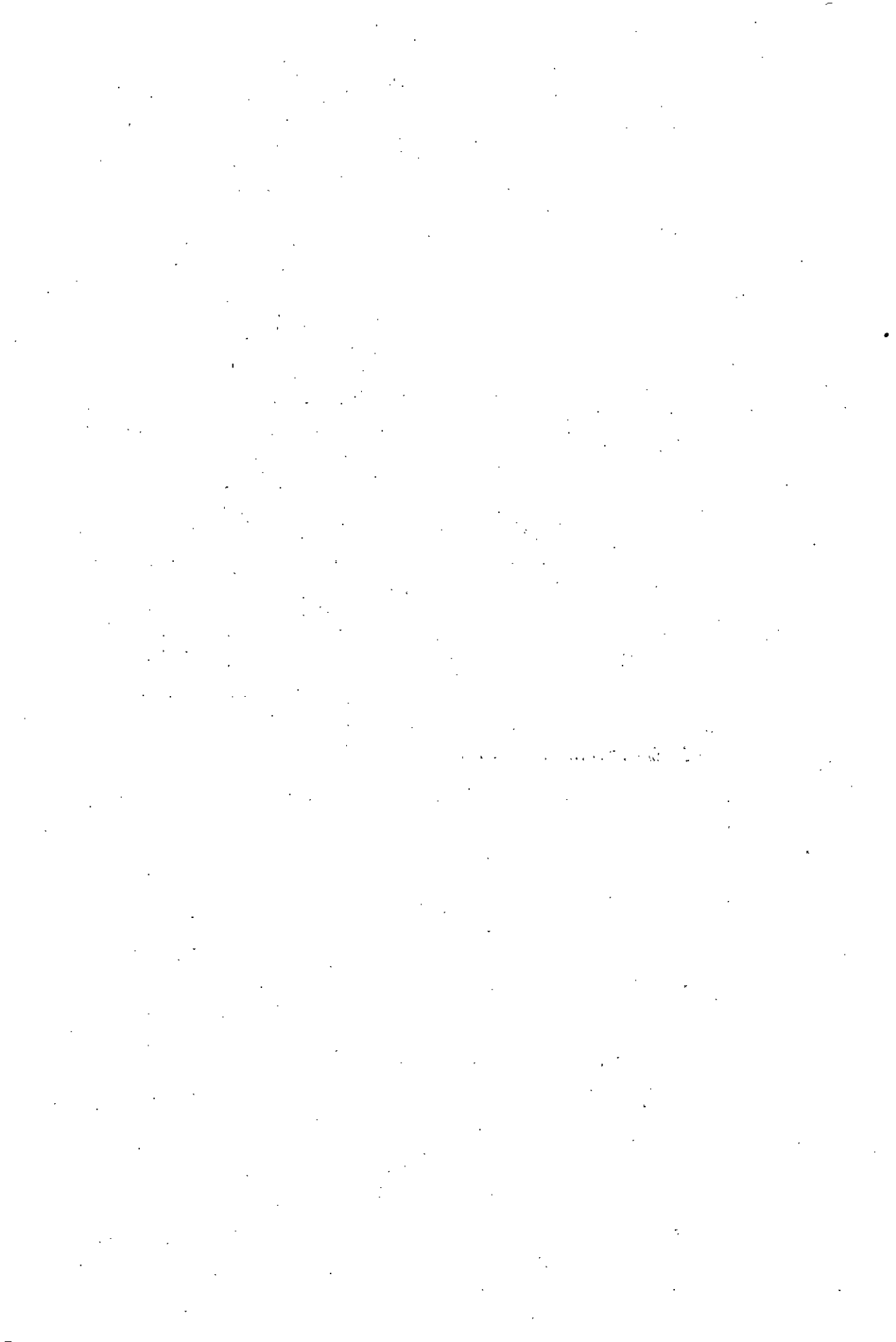
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Background: Rotavirus is the most common cause of severe gastroenteritis in infants and young children worldwide. In developing countries, rotavirus gastroenteritis is a major cause of childhood death. After a short incubation period, the typical case is mild to severe gastroenteritis characterized by vomiting, watery diarrhea and low grade fever. Most cases are mild and self-limited, but some cases can lead to severe diarrhea and dehydration which can lead to death. Vaccination early in life can be implemented to prevent most cases of severe rotavirus disease and their sequelae. **Aim of the work:** The aim of the present work is to discuss rotavirus infection, including its epidemiological and clinical features, its incidence and risk factors, methods used for its detection and diagnosis, treatment of established cases and the most recent preventive measures. To estimate the prevalence of rotavirus infection among Egyptian children suffering from watery diarrhea, an enzyme immunoassay test (RIDASCREEN®), was used for the qualitative determination of rotavirus antigen in stool samples. **Methods:** This study was conducted on a series of one hundred infants and children who suffered from diarrhea selected randomly from the outpatient gastroenterology clinic in the Specialized Pediatric Hospital of Cairo University Hospitals. Stool samples were collected from all 100 patients and tested for rotavirus antigen by means of a commercial enzyme immunoassay kit: RIDASCREEN®. **Results:** The prevalence of rotavirus infection among the 100 patients as detected by the RIDASCREEN® test was 39%. **Conclusion:** Rotavirus is by far the most common diarrheal pathogen and the most important cause of immense morbidity and mortality in children worldwide. Therefore, obtaining accurate estimates of the rotavirus disease burden are crucial to assess the need for rotavirus vaccines. However, the introduction of rotavirus vaccines as routine childhood immunizations, predicated on their safety, efficacy, expected impact, risk-benefit and cost-effectiveness, need to be addressed separately for developing countries.

Keywords:

Rotavirus, prevalence, gastroenteritis, prevention and immunization



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