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OFFICE PRACTICE

APPROACH TO ASYMPTOMATIC HBsAG POSITIVE CHILD

*Riyaz A

Abstract: Hepatitis B is an important cause of mortality and morbidity, especially in the developing countries. More than 2 billion people have evidence of past or current infection. 90% of neonates and 30% of children exposed to the virus tend to become chronic carriers. In this article, the clinical profile and fate of asymptomatic HBsAg carriers are discussed.

Key words: HBsAg carriers, Genotypes, Cirrhosis, Hepatocellular carcinoma.

Points to Remember

• In developing countries, HB is acquired mainly by perinatal transmission. This is responsible for the vast majority of chronic HBV infection and its complications like cirrhosis and HCC.

• A significant reduction in chronic HB infection and its complications can be achieved by preventing perinatal HB infection.

• The long term prognosis of inactive HBsAg carriers who are HBeAg negative and anti-HBe positive is good.

• Universal immunization is recommended as the best solution to decrease the prevalence of the disease.

References


9. Verma GR, Sharma J. Bapat MR. Natural
history of asymptomatic chronic HBsAg carriers. Indian J Gastroenterol 2001; 20(suppl 2):A81.


CURRENT STATUS OF PROBIOTICS IN CLINICAL PRACTICE

*Arun Shah

Abstract: There has been renewed interest in clinical application of probiotics in recent past. Large number of randomized trials have shown probiotics with specific strains are useful in viral diarrhea and prevention of antibiotic associated diarrhea. The use of probiotics in clinical conditions other than diarrhea is also very promising. However more studies are warranted to evaluate their efficacy before mass application.

Key words: Probiotics, Biotherapeutic agents, Infective diarrhea, Antibiotic associated diarrhea.

Points to Remember

- Probiotics with specific strains have sufficient evidence in treatment of viral diarrhea and in prevention of antibiotic associated diarrhea.

- Anterior probiotics available in Indian arket do not mention about strain specificity, and hence their efficacy is doubtful.

- Randomized trials for use of probiotics in clinical conditions other than diarrhea is very promising.

References


MANAGEMENT OF COUGH

* Subramanyam L
* Balachandran A

Abstract: Cough is a very common presentation in pediatric office practice. It is a protective reflex elicited by our body in response to an underlying cause. Systematic clinical assessment is mandatory for proper management. It is advisable not to use irrational combination of pharmacological agents.

Keywords: Cough, Asthma, GERD, Mucolytics, Cough suppressant, Bronchodilators

Points to Remember

• Chronic cough requires systematic evaluation along with a chest radiograph and other investigations for specific diagnosis, except when asthma is the etiologic factor.

• In non specific cough, a course of bronchodilator can be tried. If the cough does not resolve within the expected response time, the medication should be withdrawn and other diagnosis to be considered.

• Cough is a protective reflex – do not suppress, unless it interferes with feeding/sleeping.

• In a disturbing cough which affects sleep and feed, the cough medications can be used preferably on an SOS basis.

• Use single active ingredient only if indicated.

• Avoid irrational combination of pharmacological agents like suppressants and expectorants.

• Steam inhalation may be beneficial as home remedy.

• Prevention is better than cure - protecting the child from pollutants and allergens is the first best option.

Bibliography


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GROWING PAINS IN CHILDREN

*Mathur Sailesh Kumar
**Mathur N C

Abstract: A common presenting complaint of children visiting pediatricians in out-patient department is pain in the lower extremities. The common cause of childhood musculoskeletal pain is termed “growing pains” (GP). The pain usually appears late in the day or is nocturnal, often awakening the child. The duration ranges from minutes to hours. GP is not associated with serious organic disease and usually resolves by late childhood. The diagnosis is always by clinical examination and no laboratory investigation or imaging is required. Conservative management should be employed to ease the child’s discomfort along with other supportive measures.

Key Words: Growing pains, Nocturnal, Etiology, Management

Points to Remember

- Growing pains is very common and easy to diagnose once the typical clinical characteristics are presented.
- The diagnosis of growing pains is made clinically utilizing both inclusion and exclusion criteria.
- Once the diagnosis has been established, conservative management should be employed until the syndrome self-resolves with time, usually by adolescence.

References

DIARRHEA IN CHILDREN - AN OVER VIEW

*Indra Shekhar Rao M

Abstract: Diarrhea continues to be one of the major causes of mortality and morbidity among under fives of developing world. An over view of classification, etiology, pathophysiology, investigations, principles of management including IMNCI approach and prevention of diarrhea are covered in this review.

Keywords: Diarrhea, Etiology, Pathophysiology, Management, Prevention.

Points to Remember

- Diarrhea remains one of the major causes of morbidity and mortality among under fives
- Diarrhea can be acute or persistent and some times may present as dysentery
- Rotavirus is the most important cause of acute watery diarrhea in infants
- Prevention of dehydration, treatment of dehydration if present with nutritional support are the mainstay in management. Antibiotics are indicated in dysentery cholera and when there is evidence of other significant infections.

- Role of ORS and Zinc supplementation are vital
- Role of promotion of breastfeeding and proper hygiene in prevention of diarrhea and under nutrition should receive major emphasis in health education.

Bibliography

9. World Health organization & Unicef. Assess and classify the sick young infant age upto 2 months. In. Integrated management of neonatal and childhood illness physician chart booklet, Ministry of Health & Family Welfare, Govt. of
India, 2003; pp1-4.

IMPORTANCE OF CASE RECORD MAINTENANCE

*Satish Kamtaprasad Tiwari

Abstract: A proper record or document is the most important evidence in cases of deficiency in service or medical negligence. But there is lot of carelessness on part of medical practitioners while maintaining the records. This may result in problems in the era of legal activism. The records include history, examination, investigations, treatment including various charts, complications and referrals, etc. It is rightly said that case paper speaks for them. Just as advances in medicine are progressing in leaps and bounds, the need for good hospital records is also ever increasing.

Keywords: Documentation, Record maintenance, Medical negligence.

Points to Remember

• Documents can be friend as well as foe of the medical practitioner.
• Take a valid consent and maintain near perfect records of your patients.
• As far as possible avoid using vague, non-specific terminologies, short forms or abbreviations. The documents shall be legibly written and easily retrievable.
• The records or documents should be patient friendly and not mechanical.

Do not give unnecessary details and do not volunteer to hand over the records.

References


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PAIN MANAGEMENT IN CHILDREN

*Nitesh Singhal
** Praveen Khilnani

Abstract: Pain is a common occurrence in children often raising the anxiety level in the patient as well as the family members. Pediatricians deal with the issue of pain on a day to day basis both in inpatients and out patients whether it is induced by the disease or a procedure or minor surgery. In this article various issues regarding the practice of pain assessment and management in pediatric and neonatal age group are presented based on evidence as well as clinical experience. Various commonly available pharmacologic agents and non pharmacologic techniques are discussed.

Keywords : Pain, Management, Children.

Points to Remember

• Pain management is an important aspect of medical management of all neonates and children that every pediatrician should be familiar with.

• Failure to assess pain is a critical factor leading to under treatment. Assessment and documentation should be done at regular intervals after initiation of treatment, at each new report of pain, after pharmacologic or nonpharmacologic intervention, at an appropriate interval (e.g., 15-30 minutes after parenteral therapy, 1 hour after oral administration).

• When there is uncertainty about the presence or amount of pain even after using assessment strategies as with infants or young children, a diagnostic trial of analgesics is appropriate. Most patients can be managed by the pediatrician in outpatient department or wards.

• For postoperative pain, management with intravenous agents is required with proper monitoring of respiratory and cardiovascular status, preferably in intensive care setting.

• A consultation with pain specialist (anesthesiologist) is necessary only in situations of intractable or chronic pain not responding to usual medications.

References


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ASSESSMENT OF VISION IN A CHILD

* Sumana Datta
** Rakhi Bandyopadhyay
*** Himadri Datta

Abstract: Early recognition of any visual impairment is very important because significant visual impairment has a serious impact on all areas of development including cognition, language, social, gross and fine motor abilities. Vision assessment is an integral aspect of examination of a pediatric patient and it is possible to assess vision, at any age, using age-appropriate vision screening methods.

Keywords: Vision, Screening, Child.

Points to Remember

- Vision assessment is an integral part of examination of the child and early recognition of visual impairment is very important.
- While diagnosing visual impairment, it is mandatory to consider normal visual milestones.
- Age appropriate vision screening methods have to be chosen.

Bibliography

DIAGNOSTIC PITFALLS IN A CHILD WITH FEVER

* Baldev S Prajapati  
** Rajal B Prajapati  
*** Panna S Patel

Abstract: Fever is the most common symptom for which a physician is consulted. Appropriate diagnosis is needed for proper management. A systematic approach is required to achieve this. Pitfalls can occur in various situations like documentation of fever, identifying severity of the underlying illness, interpretation of symptoms, clinical examination, ordering and interpretation of laboratory tests, treatment etc. Pitfalls in any of these steps may lead to prolonged morbidity and related sequelae.

Keywords: Fever, Diagnostic pitfalls, History, Clinical examination.

Points to Remember

- Fever is the most common symptom in daily pediatric practice.
- Pitfalls can occur starting from the stage of documentation of fever.
- A detailed history and thorough clinical examination are mandatory for reaching the diagnosis.

$\bullet$ Sound analysis and interpretation of history, physical examination and basic investigations is the key of diagnosis in most cases of fever. Pitfalls in any of these may lead to a disaster.

References

2. Fever, the first 7 days, fever, beyond the first week. In: Rapid Diagnostic Approach to Common symptoms, standardization of pediatric office practice. Publication of Indian Academy of Pediatrics as Presidential Action Plan, 2005.


11. Mitra A. Malaria presenting with urticaria as the initial feature. Indian Pediatr 1989;26:728.


VESICOURETERIC REFLEX - WHAT'S NEW?

* Dipti Devi

Abstract: Vesicoureteric reflux is one of the most common anomalies of the urinary tract. Despite considerable experience of pediatric surgeons and nephrologists worldwide, there is lack of unanimity in its approach till now. There is lack of evidence based data because of paucity of well conducted studies. It was regarded as an important and preventable cause of renal parenchymal damage. Therapeutic approaches changed over time from surgical to conservative approach concentrating on aggressive investigation after UTI for early diagnosis. During the past decade, there is considerable debate on the clinical significance and current approach of VUR. The previous accepted dogma of ascent of bacteria from the bladder to the kidney in presence of VUR is now changing. It is now regarded as a marker of congenital hypodysplasia, voiding dysfunction and predisposition to UTI. It may be the time to retreat from the aggressive diagnostic approach after UTI. Prompt treatment of UTI and individualized approach with less invasive investigation in the high risk group may be most appropriate in this preconsensus era. DMSA has been suggested as the preferred imaging to evaluate children with UTI rather than USG and VUCG.

Keywords: VUR, Renal damage, UTI, VUCG, DMSA.

Points to Remember

- **It is important to differentiate congenital from acquired scarring. An early DMSA following UTI can solve it.**

- **The most efficient steps as clearly advocated now, are to treat UTI early and effectively and consider risk factors for acquired scarring.**

References


6. Capozza N, Lais A, Nappo S, Caione P The role


OFFICE PRACTICE

EARLY DIAGNOSIS AND MANAGEMENT OF LEARNING DISABILITIES

* Nandini Mundkur
** Chitra Sankar

Abstract: Learning disabilities are a heterogeneous group of disorders manifesting as difficulty in reading, writing, reasoning and mathematical abilities. It is presumed to be due to a dysfunction in central nervous system. Prevalence rates range from 10% to 17.5%. It is a life long disorder. Diagnosis of affected children should be before second grade for better outcome. A comprehensive psycho educational assessment is required for making a diagnosis. Management involves a good program based on phonological principles.

Management of co-morbid conditions helps in dealing with this condition more effectively. ADHD is commonly associated with learning disabilities and hence management of this is essential.

Keywords: Learning disabilities, Diagnosis, Management, Co morbid conditions.

Points to Remember

• Delayed language development in infancy is a risk factor and such children should be indexed for follow up for learning problems.

• Diagnosis by second grade is important for good outcome.

• All high risk infants should be screened for learning difficulties.

REFERENCES

1. Wallach G and Butler K (Eds.). Language Learning disability in school age children and adolescents: some underlying principles and applications. Columbus, OH; Charles E Merrill. 1994;


INTRA VENOUS IMMUNOGLOBULIN (IVIG) IN PEDIATRIC PRACTICE

*Jeeson C Unni

Abstract: Intravenous Immune globulin (IVIG) is an intravenous solution composed of heterogenous human immnoglobulin G. Peak serum concentrations occur immediately after intravenous injection and is dose related. IVIG is indicated to provide immediate passive immunity or as replacement therapy for patients with antibody deficiencies. Common indications are primary immunodeficiency, Kawasaki disease, Gullain Barre syndrome and idiopathic thrombo cytopenic purpura. IVIG should be used cautiously in children with history of hypersensitivity to human immunoglobulin and those with severe hypogammaglobulinemia or risk for thrombotic events. Live virus vaccines to be delayed until 3 months after IVIG administration. Most adverse reactions associated with IVIG are mild and transient.

Keywords: Intravenous Immunoglobulin, Indications, Contraindication, Adverse reactions.

Points to Remember

- **IVIG in pediatric practice is generally safe**
- **It is recommended for certain specific conditions in pediatric practice**

References


DERMATOLOGY

HAND-FOOT-AND-MOUTH DISEASE – AN OVERVIEW

* Jayakar Thomas

Abstract: Hand-foot-and-mouth disease (HFMD) is a viral illness with a distinct clinical presentation of oral and characteristic distal extremity lesions. Most commonly, the etiologic agents are coxsackie viruses, members of the Picornaviridae family. HFMD is more severe in infants and children than adults, but generally, the disease has a mild course. A brief prodrome of 12-36 hours duration is part of the usual presentation of HFMD. The lesions on the hands and feet are present for 5-10 days. The mucosal and cutaneous lesions heal spontaneously in 5-7 days. Usually, no medical care is necessary for HFMD. The topical application of anesthetics is beneficial. Patient Education includes good hygiene and avoidance of rupturing blisters.

Keywords: Hand-foot-and-mouth disease

Points to remember

• Hand-foot-and-mouth disease (HFMD) is a viral illness with a distinct clinical presentation of oral and characteristic distal extremity lesions.

• Most commonly, the etiologic agents are coxsackie viruses, members of the Picornaviridae family.

• HFMD is more severe in infants and children than adults, but generally, the disease has a mild course.

• A brief prodrome of 12-36 hours duration is part of the usual presentation of HFMD. The lesions on the hands and feet are present for 5-10 days.

• The mucosal and cutaneous lesions heal spontaneously in 5-7 days.

• Usually, no medical care is necessary for HFMD. The topical application of anesthetics is beneficial.

• Patient Education includes good hygiene and avoidance of rupturing blisters.

References


