

Short Review of Publications in Pediatric Gastroenterology & Hepatology

Scientific Paper 1:

IAP position paper Editor : Neonatal Cholestasis Guidelines 2012 Vidyut Bhatia, Ashish Bavdekar, John Matthai, **Yogesh Waikar** Anupam Sibal ,Recommendations: Management of Neonatal Cholestasis: Consensus Statement of the Pediatric Gastroenterology Chapter of Indian Academy of Pediatrics. Indian Pediatrics Volume 51, 2014:203-210

Recommendations: Early recognition, prompt evaluation and algorithm-based management will improve outcome in neonatal cholestasis. Inclusion of stool/urine color charts in well baby cards and sensitizing pediatricians about differentiating conjugated from the more common unconjugated hyperbilirubinemia are possible effective steps. Considering the need for specific expertise and the poor outcome in suboptimally managed cases, referral to regional centers is warranted

Scientific paper 2:

Yogesh Waikar Review of Probiotics in children.

doi:10.1016/j.pid.2013.01.002[http://www.pediatricinfectiousdisease.net/article/S2212-8328\(13\)00039-8/abstract](http://www.pediatricinfectiousdisease.net/article/S2212-8328(13)00039-8/abstract)

Probiotics are commonly used in pediatric office practice. Benefits of one probiotic cannot be generalized to another. Use of combination of probiotics is not evidence based in all clinical situations. Probiotics should be considered as drugs with pharmacokinetic, pharmaco-dynamic even pharmaco-genomic properties. Use of probiotics in chronic illness, immune-suppressed patients, critical patients in PICU/NICU needs further validation before wide spread use. Unbiased population based studies with uniform protocol are needed due to active dynamic interactions between humans and microbial species.

Scientific paper 3 :

Yogesh Waikar Pediatric Clinics: Clinical profile of Pediatric Gastroenterology & Hepatobiliary Pancreatic Sciences in central India, Vol 2 No. 8; 2014: 7-12.

Scientific paper 4 :

Yogesh Waikar New Indian Journal of Pediatrics.vol3, no 2 Pediatric Esophageal stricture, April-june 2014,57-63.

Esophageal stricture is either benign or malignant. Malignant esophageal strictures are not common in children. Causes of benign stricture include corrosives ingestion, peptic-stricture, and anastomatic stricture. These are mainly managed by surgery or dilatation. Balloon or bougie dilations remain the first treatment of choice for symptomatic esophageal strictures in children and adults. Patients with corrosive esophageal strictures have morbidity and need more dilatation sessions. Patients should be treated on an individual basis even if they have identical etiology.

Scientific paper 5 :

Yogesh Waikar New Indian Journal of Paediatrics. Review articles ,Pediatric Intestinal Failure. Oct –December 2016; vol5.4 ;205-211

Intestines are required for digestion and absorption of nutrients. Non function of small and large intestine is secondary to injury which progress to failure. Inability of gastrointestinal tract to sustain life without parenteral nutrition is the simplistic definition proposed of Intestinal failure.

1 The intestinal injury and failure is generally secondary to obstruction, dysmotility, surgical resection or congenital defect. The inability of intestines secondary to injury to maintain protein, energy, fluid, electrolyte, nutrient balance is also described as intestinal failure.2

Scientific paper 6:

Yogesh Waikar, Gastrointestinal Issues In Pediatric Animal Protein Allergy (CMPA) in New Indian Journal of Pediatrics, 2019; 8.4 : 183-188

Proper clinical history taking , examination, skin prick test, specific Ig E antibodies to cow's milk, diagnostic elimination trial, food Challenge test and endoscopic biopsy are the available diagnostic tools to diagnose and confirm Cow's milk allergy. Guidelines, consensus statements and position papers are published on diagnosis of CMPA. Holistic views of all have been considered and broad management principles are discussed.

Key learning points:

1. Cow's Milk Allergy is being diagnosed commonly in developing countries. Cognitive bias, over-investigation or under treatment should be avoided.
2. Diagnostic Elimination trial is a cost effective measure to analyze CMPA. DBPCFC is the most specific test for diagnosing food allergy. Specific IgE and Skin prick test for CMPA are not confirmatory tests but have supporting value.
3. Strict avoidance of all cow's (Animal) milk protein in food is necessary. Immunotherapy needs further validation.

Scientific paper 7:

Yogesh Waikar. Biomarkers of Liver Injury. New Indian Journal of Pediatrics, 2019; 8.2:

Biomarkers in pediatric liver disease require further validation. They vary depending on inflammatory, angiogenetic or fibrotic stage. The expression of biomarker needs to be co-related with grading and staging of liver injury. Early grades biomarker may not stay true for end stage liver disease. Inflammatory biomarkers tend to predominate depending on necrotic, cholestasis, drug induced or apoptotic liver injury pattern. Fibrotic biomarkers at end stage liver disease have different representation. Methodologically robust studies are need of hour. Therapeutic options targeting specific level of response / injury representative of biomarker is the logical next step in research. Understanding the pathogenesis and pathophysiology of liver injury by clinical biomarker signature would expand our vision in diagnostic, prognostic and therapeutic domains in liver Injury.

Scientific paper 8:

Yogesh Waikar

Pediatrician's Vision of Pediatric Gastroenterology & Hepatology: KAP

Study <https://nijp.org/pediatricians-vision-of-pediatric-gastroenterology-hepatology-kap-study/>

Pediatric Gastroenterology is one of the developing pediatric subspecialties in India. Spectrum of issues includes GI luminal conditions, Hepatology, Pancreatic diseases, and Nutritional disorders. Numbers of Pediatric Gastroenterologists practicing in India are few as compared to Pediatricians. Pediatric gastroenterology as a branch faces many different challenges in current scenario. Many of the disorders cared in Pediatric Gastroenterology are chronic and have short & long term impact. Management strategies for these conditions need to encompass team approach, with an emphasis upon optimal care. This study reinforces the need to study prevalent practices and management styles, subsequently direct the resources for early identification and proper treatment of kids with GI and liver diseases.

Scientific paper 9 :

Yogesh Waikar. Deep Pediatric Gastroenterology with Block Chain. Invited Review PGLJ,2019 Oct-Dec,.vol1 (4):1-4

Deep learning and Block chain are the systems where one can generate and explore further medical sciences. Current medical systems and its developmental process are restricted to randomised control trials and their associates. Both deep learning and block chain are underused either due to ignorance or fear. Block chain can give trust to the developed deep learnt algorithms .Both can speed up medical science without biases and can take clinical subjects to their full potential.

Combining deep learning and block chain would definitely make field of paediatric gastroenterology interesting both in research and clinical sciences. The way of Meta analysis and Meta review would change. Guidelines would be more uniform and populations specific.

Multiple point coordination would be easily possible .Generating library of blocks which are trustworthily managed with block chain is easily possible in future. Integrated decision making by Clinical data, histopathological data, endoscopic images and radiological pattern in disease in specific manner would give more clarity on patient state. Both systems would work as a support to clinical sciences. Only underlying condition necessary is the truth of data mining and data entry.Link<https://drive.google.com/file/d/13xXaW7bafTb3AxnD6U4s6BirNdPZ3Jfh/view?usp=drivesdk>

Scientific paper 10:

Yogesh Waikar. Role of Nutrition in Paediatric Irritable Bowel Syndrome. J Neo Res Pedia Care 2018, 1(2): 180006

Pediatric irritable bowel syndrome is one of the functional gastrointestinal disorders. Its prevalence is increasing. Abdominal pain, diarrhoea and constipation are the common symptoms. It's easy to get cognitively biased and over investigate & treat these kids. Appropriate diagnosis with the help of Rome Criteria is necessary. Management of these children with help of pediatric gastroenterologist, certified dietician and psychologist is now possible. Role of dietary modifications in management is discussed in this review

Scientific paper 11:

Yogesh Waikar. Diagnosing Paediatric NAFLD. Invited Review PGLJ, July-Sep, vol1 (3)2019:13-20 Non alcoholic fatty liver disease (NAFLD) is accumulation of excessive fat in liver. It progress to inflammation and cirrhosis. Ethnic differences and clinical heterogeneity regarding NAFLD is well known. More children are getting diagnosed. Multiple factors are involved in pathology of NAFLD. This review focuses on diagnosis of NAFLD children based on available guidelines and literature. Clinical approach to NAFLD is suggested.

Scientific paper 12:

Waikar Y (2018) Infantile Colic: An Overview. Neonat Pediatr Med 4: 153. DOI: 10.4172/2572-4983.1000153 Infantile colic is a common problem faced by pediatricians in their routine Outdoor patient department. Multifactorial etiology of infantile colic is known. Many drugs and probiotics are empirically used to treat infantile colic. Proper diagnosis and treatment is important. Parental counseling plays a major role in the treatment. This is an overview of current literature available on management of this condition.

Scientific paper 13:

Yogesh Waikar Pediatric infectious disease journal, Interpretation of Liver Function Test in tropical infections, VOL111, NO.1, JAN-JUN2011.34-42. <http://download.journals.elsevierhealth.com/pdfs/journals/2212-8328/PIIS221283281180007X.pdf> Causes of elevated serum levels of conjugated bilirubin are basically hepatobiliary infections. The rate-limiting step in all these conditions is the inability of hepatocyte mass to excrete conjugated bilirubin due to infections. This process leads to accumulation of conjugated bilirubin and eventual 1 "overflow" leakage into the serum. With liver infection, enzymes leak into plasma and can be useful for diagnosis and monitoring of liver injury. Enzymes are released from hepatocytes as a result of injury to the cell membrane that directly causes extrusion of the cytosolic contents. Accumulation of bile salts with canalicular obstruction causes release of membrane 2, 3 fragments with attached canalicular enzymes.

Scientific paper 14:

IAP position paper in Acute Liver Failure.2012.(Contributor :**Yogesh Waikar**)
Viral hepatitis is the leading cause of acute liver failure (ALF) in India. Search for metabolic etiology, particularly in infants and neonates, and in apparently idiopathic cases needs to be done. Planning for early transfer is important as the risks involved with patient transport may increase or even preclude transfer at later stages. Management should be in an intensive care setting in select situations. There is currently insufficient evidence to routinely prescribe branched-chain amino acids, non-absorbable antibiotics or lactulose. Group recommends use of N-acetyl cysteine routinely in patients with ALF. Administration of antibiotics is recommended where infection is present or the likelihood of impending sepsis is high. Enteral nutrition is preferred to parenteral nutrition. Protein restriction is not recommended. An international normalized ratio >4 or Factor V concentration of <25% are the best available criteria for listing for liver transplantation. Overall 40-50% of ALF patients survive without transplantation. Survival in patients fulfilling criteria for liver transplantation and not transplanted is 10-20%. Liver transplantation is a definite treatment for ALF with high one-and five-year survival rates.

Scientific paper 15:

Yogesh Waikar Oesophageal strictures in children: retrospective analysis & review, JAMS2011-12, pg 27-32

Book Chapters:

1. IAP textbook of PICU PROTOCOLS 2nd edition 2012, Approach to GI BLEED : protocol and guidelines. Yogesh Waikar, Soonu Udani ,Jaypee brothers .Pg, 108-113
2. IAP Pediatric Infectious disease color atlas; section editor Pediatric Gastroenterology & Hepatology. Atlas of Pediatric Infectious diseases, Jaypee publisher, 2013,section 4,Gastrointestinal [infections.pg](#). 49-56
3. Book chapter: Recent advances in Pediatrics vol23, Pediatric Gastroenterology, Hepatology& Nutrition, 2013 publisher: jaypee. chapter 27.Probiotics.
4. Book chapter: Recent advances in Pediatrics vol23, Pediatric Gastroenterology, Hepatology& Nutrition, 2013 publisher: Jaypee. Chapter 15.Portal Hypertension.
5. Book Chapter, Textbook of Paediatric Gastroenterology, Hepatology & Nutrition. 1st edition, Jaypee Publisher.Chapter 1, Developmental Anatomy and Physiology of GI tract.3-5
6. Book Chapter, PG Textbook of Paediatrics,Vol 2, Gastroenterology section , 1st edition, Jaypee publications.Chapter 35.19, Abdominal Tuberculosis.1373-1374
7. Book Chapter, The Best of Indian Pediatrics,2nd edition,CBS Publishers, Management of Neonatal Cholestasis,chapter7, 67-75.
- 8.Book Chapter. Pedgastro CME 2015. ISPGHAN & IAP Rajasthan.Approach to GI bleed in children. page 53-56.
- 9.OSCE in Neonatology ,a guide book .Jaypee Publications 2018.Neonatal Hepatology.Hepatobiliary case [studies.pg](#) 220-223
10. Differential Diagnosis in Paediatrics, Jaypee Publications2019,Section 9,Gastroenterology, Steatorrhea, pg.293-294