Ribavirin for Chronic Hepatitis E Virus Infection in Transplant Recipient Patients

Kamar N. *et al.*

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As there is no established therapy for Hepatitis E (HEV) infections, the effects of ribavirin were studied after solid-organ transplantion in 50 patients with prolonged viremia. Ribavirin was started a median of 9 months following the diagnosis of HEV infection at a median dose of 600 mg/day for a median of three months duration. Clearance of viremia was observed in 95% of the patients in whom HEV RNA serum level was detectable for a duration of 6 months.

Vocal Cord Paralysis and Dysphagia after Aortic Arch Reconstruction and Norwood Procedure

Pham V, Connelly D, Wei J, Sykes K, O'Brien J.

Otolaryngology - Head and Neck Surgery (Feb 2014)

To determine the incidence of vocal cord (VC) paralysis and dysphagia after aortic arch reconstruction, including the Norwood procedure.

Database/Chart review of neonates requiring Norwood or arch surgery between January 2005 and December 2012 was performed, which included review of demographics, postoperative VC function, dysphagia, need for gastrostomy tube and/or tracheotomy, and long-term follow-up.

A total of 151 consecutive subjects (96 Norwood, 55 aortic arch) were reviewed. Median age at repair was 9 days (interquartile range [IQR], 7-13) for Norwood and 24 days (IQR, 12-49) for arch reconstruction (P<.001). The documentation of VC motion abnormality was found in 60 of 104 (57.6%) subjects and unavailable in 47 (16 without documentation and 31 who died prior to extubation). No significant differences were observed in proportions of documented VC motion (P = .337), dysphagia (P = .987), and VC paralysis (P = .706) between the arch and Norwood groups. Dysphagia was found in 73.5% of Norwood and 69.2% of arch subjects who had documented VC paralysis. Even without unilateral VC paralysis (UVCP), dysphagia was present (56% Norwood, 61% arch). Overall, 120 of 151 (79.5%) required feeding evaluation and a modified feeding regimen. Gastrostomy was required in overall 31% of Norwood and 23.6% of arch reconstruction. To date, mortality in this series is 55 of 151 (36.4%) patients. Of those with VC paralysis, only 23 (22%) had any otolaryngology follow-up after

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discharge from surgery. More than 75% having VC paralysis with follow-up after hospital discharge had persistent VC paralysis 11.5 months after diagnosis.

High incidence of UVCP and dysphagia has been reported after Norwood and arch reconstruction. Dysphagia was highly prevalent in both groups even without UVCP. Preoperative discussion on vocal cord function and dysphagia should be considered.

CERITINIB in ALK-rearranged nonsmall-cell lung cancer

Shaw AT. *et al.*

NEJM 2014; 370: 1189-1197.

It has been studied that Ceritinib is a new ALK inhibitor showing greater antitumor potency.

In the phase 1 study, 50150 mg ceritinib was administered once daily into 59 patients with advanced lung cancer. Dose-limiting toxic effects included diarrhea, dehydration, elevated ALT and AST, and hypophosphatemia. Among patients with nonsmall-cell cancer who received at least 100 mg of ceritinib daily, the median progression-free survival was 7 months, which was significantly longer.

Efficacy of magnetic resonance urography in detecting renal scars in children with vesicoureteral reflux

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Pediatric Nephrology (Feb 2014)

The detection of renal scars is of paramount importance for optimal clinical management of patients with urinary tract infection (UTI) and vesicoureteral reflux (VUR). The aim of our study was to compare the efficacy of unenhanced magnetic resonance urography (MRU) and Tc-99(m) dimercaptosuccinic acid (Tc-DMSA) scintigraphy to detect renal scars.

Unenhanced MRU and Tc-DMSA scintigraphy were performed in 49 children (10 boys, 39 girls; mean age 7.4 4.2 years, range 1-15 years) with documented VUR. MR imaging scans were obtained within 7 days after voiding cystourethrogram (VCUG) and Tc-DMSA scintigraphy. The diagnostic performance of MRU in renal scar detection was calculated relative to that of the Tc-DMSA scan.

The renal scar detection rates of Tc-DMSA scintigraphy and unenhanced MRU in kidneys with VUR was 32.4 and 25.9 %, respectively. The sensitivity and specificity of MRU in the detection of renal scars was 80% and 82.6% in kidneys with VUR, respectively. No statistically significant difference in lesion detection was observed between MRU and Tc-DMSA scintigraphy (P>0.05). MRU and Tc-DMSA scintigraphy showed good agreement (=0.60).

Unenhanced MRU is a robust technique for the morphologic assessment of the urinary system and detection of renal scars. The lack of radiation and contrast material makes this technique a much safer alternative to scintigraphy in children with VUR, particularly in those who require follow-up scanning and, consequently, considerable radiation exposure.

Enteral Energy and Macronutrients in End-Stage Liver Disease

Mouzaki M, Ng V, Kamath B, Selzner N, Pencharz P, Ling S.

Journal of Parenteral and Enteral Nutrition (Feb 2014)

Protein-energy malnutrition is the most common comorbidity affecting adults and children with end-stage liver disease. Despite clear evidence linking malnutrition to poor outcomes before and after liver transplantation, nutrition rehabilitation is often inadequately emphasized in the clinical management of these patients. The primary aim of this review is to synthesize the available evidence supporting the current clinical guidelines on enteral nutrition support and, more important, to highlight the lack of evidence behind much of what is considered standard of care for the nutrition management of patients with cirrhosis. In addition, the mechanisms of malnutrition are reviewed, the limitations of tools used to assess body composition in this setting are discussed, and the differences in macronutrient metabolism between healthy subjects and patients with the end-stage liver disease are explained. A summary of recommendations is provided.

FDA Clarifies Warning about Use of Sildenafil for Pediatric Pulmonary Arterial Hypertension

Rockville, Md

US Food and Drug Administration, DocGuide.com, March 31, 2014

The US Food and Drug Administration (FDA) is clarifying its previous recommendation related to prescribing sildenafil (Revatio) for children with pulmonary arterial hypertension (PAH).

Sildenafil is FDA-approved to treat PAH only in adults, not in children; however, health care professionals must consider whether the benefits of treatment with the drug are likely to outweigh its potential risks for each patient.

The FDA revised the sildenafil drug label in August 2012, adding a warning stating that use of sildenafil, particularly chronic use, is not recommended in children. This recommendation was based on an observation of increasing mortality with increasing sildenafil doses in a long-term clinical trial in pediatric patients with PAH. The FDA issued a Drug Safety Communication at that time.

There may be situations in which the benefitrisk profile of sildenafil may be acceptable in individual children; for example, when other treatment options are limited, sildenafil can be used with close monitoring.

The purpose of the August 2012 recommendation was to raise awareness of clinical trial results showing a higher risk of mortality in pediatric patients taking a high dose of sildenafil when compared with pediatric patients taking a low dose.

This recommendation was not intended to suggest that sildenafil should never be used in children; however, some health care professionals have interpreted this information as a contraindication and have refused to prescribe or administer the drug.

The evidence behind the FDAs initial recommendation has not changed; this communication is to clarify the strength of the warning communicated in the sildenafil drug label.

Health care professionals and patients are encouraged to report adverse events or side effects related to the use of these products to the FDAs MedWatch Safety Information and Adverse Event Reporting Program: www.fda.gov/MedWatch/report.htm

Mean platelet volume as an indicator of disease activity in juvenile SLE

Yavuz S, Ece A.

Clinical Rheumatology (Feb 2014)

The aim of this study was to assess mean platelet volume (MPV) in children with systemic lupus erythematosus (SLE) at the active and inactive stages. Twenty children with SLE and 30 age- and gender-matched controls were enrolled. Demographic data, SLE disease activity index (SLEDAI), erythrocyte sedimentation rate (ESR), C-reactive protein (CRP), MPV, complement 3 (C3), complement 4 (C4), urine protein (Up), and urine creatinine (Ucr) values upon reactivation and remission phases were recorded. MPV was statistically higher in patients than in controls and significantly increased in active phase compared to inactive phase ($p=0.001$). An MPV level of 8.4 fL was determined as a predictive cutoff value of activation of SLE (sensitivity 75%, specificity 90%). MPV was positively correlated with SLEDAI ($p=0.01, r=0.55$), ESR ($p=0.01, r=0.45$), CRP ($p=0.04, r=0.24$), and Up/Ucr ($p=0.01, r=0.45$) and negatively correlated with C3 ($p=0.02, r=-0.36$), albumin ($p=0.01, r=-0.63$), and Hb ($p=0.01, r=-0.48$). No any significant relationship was observed between MPV and the histological classification of lupus nephritis ($p=0.65$). MPV might be used as an early indicator of reactivation in children with SLE. They concluded that MPV seemed to be more accurate than ESR, CRP, and C3 for monitoring the disease activity in SLE.