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**REFERENCES**

1. Villegas L, Cahill AM, Meyers K. Pediatric renovascular hypertension: Manifestations and management. Indian Pediatr. 2020;57:443-51.
2. Louis R, Levy-Erez D, Cahill AM, Meyers KE. Imaging studies in pediatric fibromuscular dysplasia (FMD): A single-center experience. Pediatr Nephrol. 2018;33: 1593-99.
3. Singhal M, Singh S, Gupta P, Sharma A, Khandelwal N, Burns JC. Computed tomography coronary angiography for evaluation of children with Kawasaki disease. Curr Probl Diagn Radiol. 2018;47:238-44.
4. Rashed M, Banka P, Barthur A, et al. Effects of dose reduction on diagnostic image quality of coronary computed tomography angiography in children using a third-generation dual-source computed tomography scanner. Am J Cardiol. 2018;122:1260-64.

**AUTHORS' REPLY**

Thank you for your interest in our review article [1]. The different imaging modalities were placed in the review to provide a comparison of the various tests and the associated risks. Although an MRA and CTA have been shown to have high sensitivity and specificity alongwith high quality images, renal artery stenosis can still be missed, specifically in patients with intra-renal arterial disease. The sensitivity and specificity of MRA is not as good in small children as it is in adults. This is the reason why DSA was selected for pediatric patients with a high pre-test probability of renovascular hypertension and patients with an associated genetic syndrome (see *Web Table 1* [1]). We reiterate that we should suggest DSA to confirm a diagnosis of RAS, given the small vasculature within the pediatric population and its ability to guide potential timely intervention.

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**REFERENCES**

1. Villegas L, Cahill AM, Meyers K. Pediatric renovascular hypertension: Manifestations and management. Indian Pediatr. 2020;57:443-51.

## Vitamin D Deficiency: Definition Matters!

We read the recently published articles on vitamin D deficiency in the journal [1,2], and wish to raise certain related issues. We believe that the true burden of vitamin D deficiency/insufficiency and its associations cannot be estimated unless a standard consensus definition is used. At least, for the studies having important public health implications, the adherence to the "consensus definitions" is desirable, as the prevalence of the problem varies with the definition used. The cut-offs used for defining deficiency/insufficiency by Singh, et al [1] are based on a decade-old study. Almost all the current guidelines state that vitamin D3 level <12 ng/ml should be considered deficient, 12-20 ng/mL as insufficient and >20 ng/mL as sufficient [3,4]. The nutrition-based studies have shown that a level of 20 ng/mL would meet the needs of 97.5% of the population [3,4]. Singh, et al [1] used a cutoff of 11-32 ng/mL for defining insufficiency, which includes many babies with sufficient levels [1]. Hence, their conclusions should be interpreted carefully. It would have been helpful if the results were shown as odds ratio (Odds of having neonatal sepsis in presence of vitamin D deficiency), and the dose relationship of vitamin D levels with sepsis could be presented. It will help in better risk-stratification and will have therapeutic implications too.

Conversely, the consensus definition of neonatal sepsis is lacking until now and the definitions that are currently used in various studies vary greatly [5]. This extreme degree of variability makes the interpretation difficult. In this study [1], the criteria used for defining various categories of neonatal sepsis are extremely confusing and differ greatly from the somewhat "agreeable definition" of neonatal sepsis. We acknowledge that this variability may be due to the lack of consensus on the best definition of neonatal sepsis.

Vitamin D deficiency is reported to be quite prevalent in India, and there is a recognized need for prophylactic supplementation during infancy. However, as highlighted by a recent survey [6], the practice of prescribing routine vitamin D supplementation varies greatly. Therefore, there is an urgent need for the researchers to use a single, scientific, and consensus-based definition for defining vitamin D deficiency, so that clear evidence-base is provided for guidelines on routine vitamin D supplementation in infancy.

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**REFERENCES**

1. Singh P, Chaudhari V. Association of early-onset sepsis and vitamin D deficiency in term neonates. Indian Pediatr. 2020;57:232-4.

2. Kumar RK, Das H, Girish SV, Nevilebasappa A. Prevalence of vitamin D deficiency among newborns. Indian Pediatr. 2020;57:258-9.
3. Randev S, Kumar P, Guglani V. Vitamin D Supplementation in childhood - A review of guidelines. Indian J Pediatr. 2018;85:194-201.
4. Khadilkar A, Khadilkar V, Chinnappa J, et al. Prevention and Treatment of Vitamin D and Calcium Deficiency in Children and Adolescents: Indian Academy of Pediatrics (IAP) Guidelines. Indian Pediatr. 2017;54:567-73.
5. McGovern M, Giannoni E, Kuester H, et al. Challenges in developing a consensus definition of neonatal sepsis. Pediatr Res. 2020;88:14-26.
6. Dabas A, Bharadwaj M, Shah D, Gupta P. Online survey of vitamin D supplementation practices in children and adolescents. Indian Pediatr. 2020;57:749-50.

#### AUTHORS' REPLY

We thank the readers for taking interest in our study [1]. As rightly pointed out, levels for vitamin D deficiency have been a source of contention. The International Association of Endocrinology defined a vitamin D level of 21-29 ng/mL as insufficiency and <20 ng/mL as deficiency in adults [2]. However, the levels of vitamin D insufficiency and deficiency are not clearly defined and the discussion about the prevalence of vitamin D deficiency is ongoing [3]. The cut-off levels used in our study were based on a study in neonates [4], as we did not have Indian guidelines in place at that time. IAP consensus statement on vitamin D [5] was published after we completed our study. Indian studies can now be done taking these values as guidelines for our population. Association of dose relationship of severity of vitamin D deficiency with sepsis and odds ratio will definitely provide information on risk stratification, and other researchers are encouraged to address this.

Sepsis in neonates still needs definitions that can be followed practically by neonatal centers. The definition used by

us was the most practical in our setting, as it has taken clinical criteria and laboratory investigations as parameters in a scoring system for defining sepsis [6]. Non availability of micro ESR in our setup prevented us from using neonatal sepsis definitions which incorporate it in the scoring system [7].

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#### REFERENCES

1. Singh P, Chaudhari V. Association of early-onset sepsis and vitamin D deficiency in term neonates. Indian Pediatr. 2020;57:232-4.
2. Holick MF, Binkley NC, Bischoff-Ferrari HA, et al. Endocrine Society. Evaluation, Treatment, and Prevention of Vitamin D Deficiency: An Endocrine Society Clinical Practice Guideline. J Clin Endocrinol Metab. 2011;96:1911-30.
3. Shah D, Gupta P. Vitamin D deficiency: Is the pandemic for real? Indian J Community Med. 2015;40:215-7.
4. Cetinkaya M, Cekmez F, Buyukkale G, Erener-Ercan T, Demir F. Lower vitamin D levels are associated with increased risk of early-onset neonatal sepsis in term infants. J Perinatol. 2015; 35:39-45.
5. Khadilkar A, Khadilkar V, Chinnappa J, et al. Prevention and Treatment of Vitamin D and Calcium Deficiency in Children and Adolescents: Indian Academy of Pediatrics (IAP) Guidelines. Indian Pediatr. 2017;54:567-73.
6. Puopolo JP, Eichenwald EC, Stark AR. Bacterial and fungal infections. In: Manual of Neonatal Care Cloherty, 6th Edition, Lippincott Williams and Wilkins; 2008.p.274-300.
7. Singh M. 16 Perinatal infections. In: Care of the Newborn. 8th edition, CBS publishers and distributors: 2015. p.267-98.

## Using Whatsapp to Facilitate Inter-institutional Patient Transfer

Social media and messaging services like WhatsApp have found an important place in the medical field and patient care. It has been widely used for intra-institutional referral, patient awareness and medical education [1], and also for telemedicine [1,2]. However, its use in inter-institutional referrals and patient transfer is not widely documented.

Lack of a proper referral system affects patient care as many are referred to tertiary centers due to non-availability of specialized services in local hospitals. In majority of the cases the referrals are not planned, and it is not through institutional

mechanisms. Hence, the patients visit the hospital on their own, and may face refusal. This causes significant delay in treatment which contributes directly to morbidity and mortality. We used WhatsApp as a medium to facilitate transfer of pediatric patients, including neonates, from pediatric department of one hospital (which does not have pediatric surgical support) to our tertiary care hospital. The WhatsApp group included the consultants and residents of the concerned department from both the hospitals. Patient details, investigations (biochemistry, hematological and radiological) are initially uploaded on the group. We assess the case on the messenger and coordinate the transfer. The patient is then transferred to us in an ambulance with an accompanying doctor. Our team saves a lot of precious time in investigating these patients as they have already been done as per our requests, and surgery is planned at the earliest based on the indication and patient condition. The total number of cases transferred since the creation of this group (June, 2019) was 182 (140 newborns and 42