 **Low blood vitamin D levels linked to diabetes.** (*J Clin Endocrinol Metab.* 2015;Feb 23:jc20143016)


The relationship of 25-hydroxyvitamin D [25(OH)D] with obesity and type 2 diabetes is not completely understood. In this Spanish study, it was tried to establish some relation between Vitamin D receptor (VDR) expression in adipose tissue which is related to obesity and it is hypothesized that it might be regulated by 1,25-dihydroxyvitamin D₃ [1,25(OH)₂D₃]. It was observed that 25(OH)D levels are diminished in Prediabetic and Diabetic compared to Normoglycemic subjects, independently of body mass index, and are closely related to glucose metabolism variables, suggesting that vitamin D deficiency is associated more with carbohydrate metabolism than with obesity. Moreover, adipose tissue has a different response to 1,25(OH)₂D₃ depending on the degree of obesity. This is one of the various associations recently found with Vitamin D level but the findings need to be confirmed by interventional studies.

 **Early pneumonia - A major risk factor for adult chronic obstructive pulmonary disease.** (*Pediatrics.* 2015;Mar 2: pii:peds.2014-3060)


Decreased lung function and increased prevalence of asthma is reported in children with a history of early lower respiratory illnesses, including pneumonia. Whether these associations persist up to adulthood has not been established and this study tried to look in to this and has come out with eye opening conclusion that “Early pneumonia is associated with asthma and impaired airway function, which is partially reversible with bronchodilators and persists into adulthood. Early pneumonia may be a major risk factor for adult chronic obstructive pulmonary disease.” This is an important finding and we need to educate parents and children about this risk in later life.

 **Estimation of GFR using β -trace protein in children.** (*Clin J Am Soc Nephrol.* 2015;10:401-9)


Gender may affect the performance of small molecular weight proteins as markers of GFR because of differences in fat mass between the two sexes. The hypothesis behind this study was that the diagnostic performance of β -trace protein, a novel marker of GFR, would be significantly better in boys than in girls. In this study, GFR-estimating formulas on the basis of β -trace protein, creatinine, and height were derived using stepwise linear regression analysis of log-transformed data. It was found that β -trace protein was more important than creatinine and height in the data generation groups. The new formulas performed significantly better than the previous Benlamri, White, and Schwartz formulas with respect to bias, precision, and accuracy. We must start using these new improved and sex-specific formulas for the estimation of GFR in children.

 **Multimodal neuroimaging-based classification of autism spectrum disorder – More perfect.** (*Cortex.* 2015;doi:10.1016/j.cortex.2015.02.008)

We have now more awareness about Autistic Spectrum Disorder (ASD) and a number of neuroimaging techniques, such as functional MRI, structural MRI, diffusion tensor imaging (DTI), and proton magnetic resonance spectroscopy (1H-MRS), are used for its diagnosis. These techniques have uncovered evidence for widespread functional and anatomical brain abnormalities in ASD suggesting it to be a system-wide neural systems disorder. Initial findings of this study showed increased cortical thickness in ASD participants, compared to controls, across the left cingulate, left pars opercularis of the inferior frontal gyrus, left inferior temporal cortex and the right precuneus; reduced cortical thickness in the right cuneus and right precentral gyrus; reduced white matter connectivity (as measured by reduced fractional anisotropy and increased radial diffusivity) for two discrete clusters on the forceps minor of the corpus callosum; and reduction in N-acetylaspartate in the dorsal anterior cingulate cortex. Multimodal imaging has potential to better inform on the neural characteristics most relevant to the disorder, and will help in diagnosis of ASD.

 **Tonsillectomy for treatment of psoriasis!** (*J Am Acad Dermatol.* 2015;72:261-75)

The relationship between streptococcal pharyngitis and psoriasis is well known but it was unknown whether tonsillectomy decreases psoriasis symptoms in those patients. To find out this, a systemic review of more than 20 published studies dating back to 1960 was done. Surprisingly, it was observed that tonsillectomy may be a potential treatment option in patients with recalcitrant psoriasis associated with episodes of tonsillitis, but there is a need for additional studies to examine both the extent and persistence of benefit of tonsillectomy in psoriasis patients.

 **Guideline for first-line treatment of allergic rhinitis** (*Otolaryngol Head Neck Surg.* 2015;152:S1-S43)

A very common disease encountered by pediatricians, Acute Allergic Rhinitis, has now a new, comprehensive guideline from The American Academy of Otolaryngology; 1,605 randomized, controlled trials, 31 existing clinical practice guidelines, and 390 systematic reviews of the literature regarding allergic rhinitis in adults and children older than age 2 years were studied and also compiled 14 key recommendations that underwent extensive peer review. Guideline advocates that first-line treatment for allergic rhinitis should include intranasal steroids, as well as less-sedating second-generation oral antihistamines for patients whose primary complaints are sneezing and itching.

AMIT P SHAH
drnehamit@gmail.com