

MEDICAL UPDATES

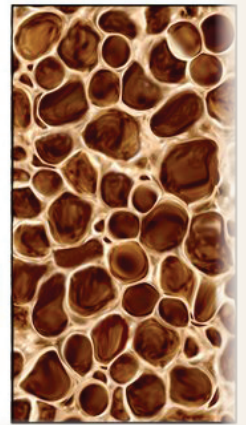
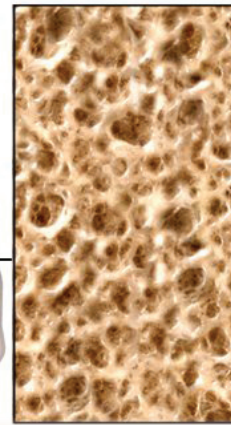
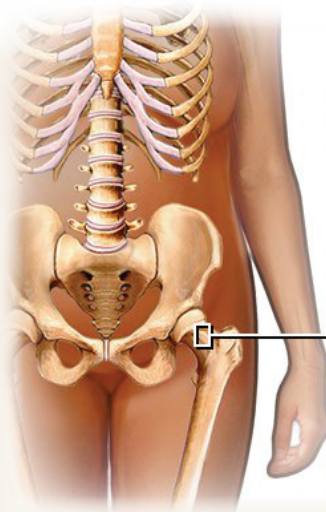


Issue No.:10 July 2012

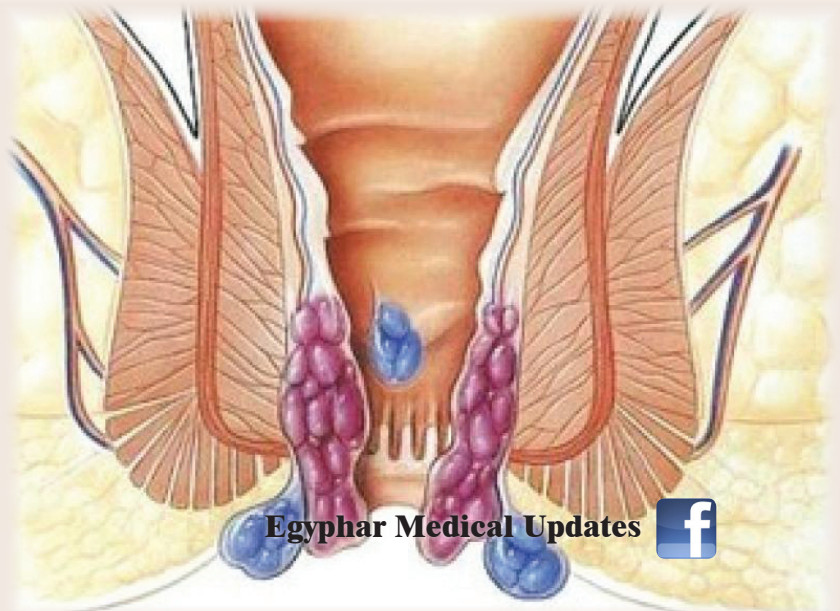


Allergic Rhinitis in Children: Prevalence and Risk Associations

Vitamins and Bone Health: Beyond Calcium and Vitamin D.



Management of Haemorrhoidal Disease

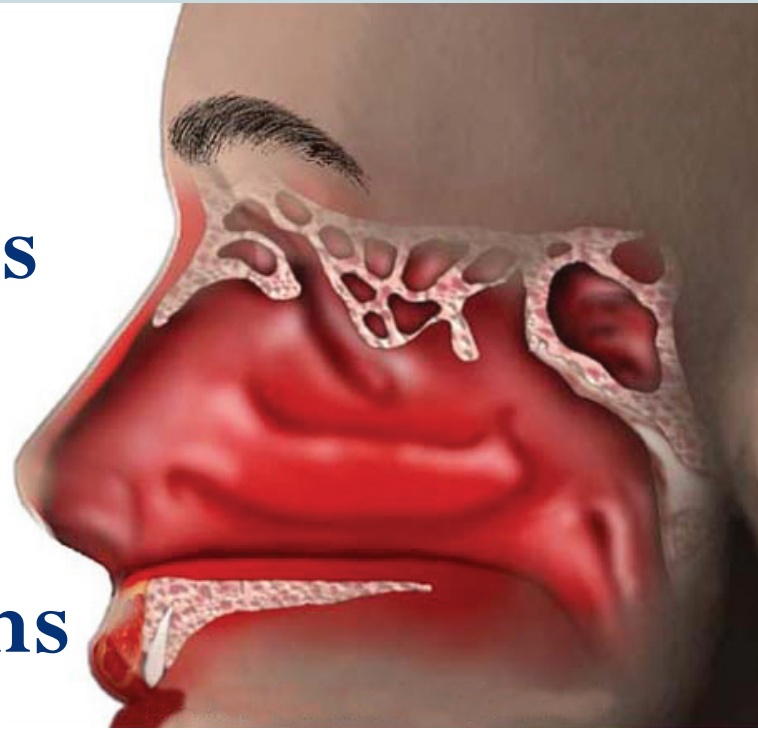


Egyphar Medical Updates



2012 May 24. doi: 10.1002/ppul.22554.

Allergic Rhinitis in Children: Prevalence and Risk Associations



ABSTRACT

BACKGROUND:

The age-related comparative prevalence of allergic rhinitis (AR) and non-allergic rhinitis (NAR) in children is poorly defined. We aimed to characterize AR and NAR in children.

METHODS:

This study enrolled children with chronic rhinitis who presented to a tertiary paediatric center for a diagnostic skin prick test (SPT). Parents completed a medical history questionnaire for their child, including disease activity for asthma and rhinitis. Sociodemographic data was obtained and all participants underwent a common inhalant SPT panel. A positive SPT indicated AR.

RESULTS:

From March 2001 to March 2009, 6,660 children (64% male) were enrolled (aged 6 months to 19

Chiang WC, Chen YM, Tan HK, Balakrishnan A, Liew WK, Lim HH, Goh SH, Loh WY, Wong P, Teoh OH, Goh A, Chay OM.

years, mean 7.82 years). Only 3.7% (249) of the children were <2 years old, and almost 30% of these had AR. Most children with AR (73%) presented after age 6. Males were more likely to have AR (vs. NAR) (OR 1.5; CI 1.39-1.77). Antihistamine and salbutamol use did not differ between children with AR and NAR. Children with AR were more likely to require adjunct therapy with inhaled corticosteroids (51.2% vs. 43.2%, $P < 0.001$), have drug hypersensitivity (especially antipyretic drugs) (2.5% vs. 1.3%, $P = 0.384$) or an asthma admission (9.1% vs. 6.0%, $P < 0.001$).

CONCLUSIONS:

AR is more common in male children, is relatively rare below the age of 2 years, and accounts for two-thirds of all childhood chronic rhinitis and 73.3% of all chronic rhinitis in school-aged children (≥ 6 years old). Children with AR have more severe rhinitis symptoms and more often suffer from asthma-related events and admissions.

Vitamins and Bone Health: Beyond Calcium and Vitamin D.

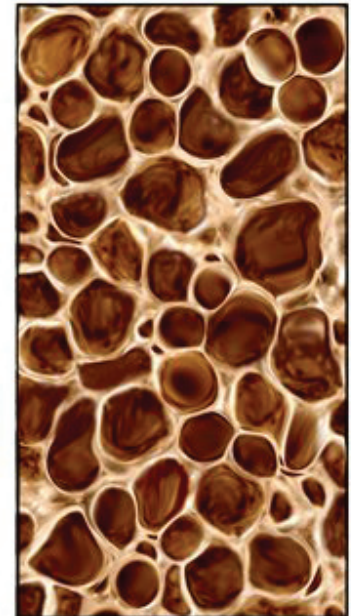
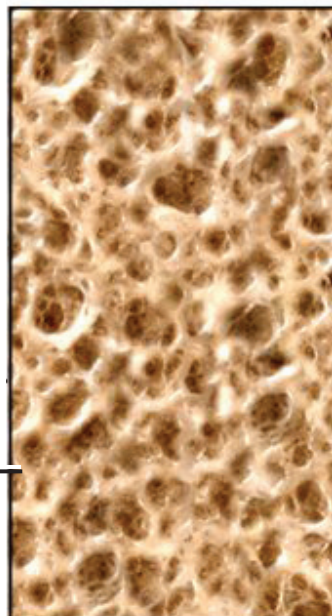
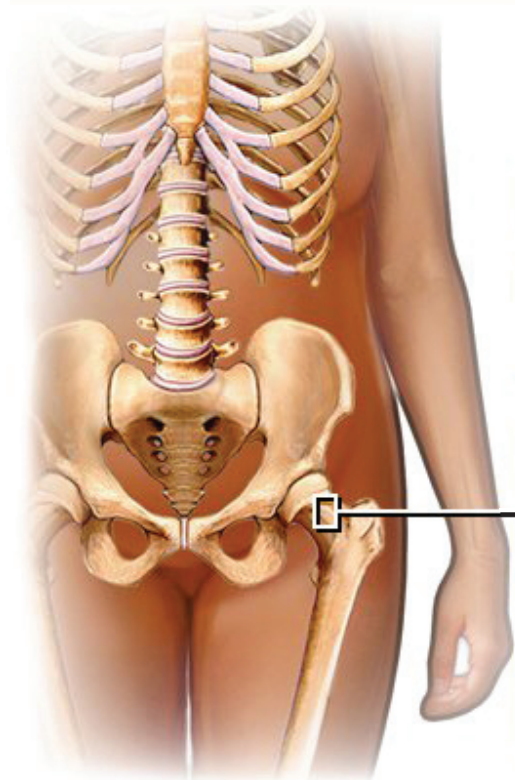
Ahmadieh H, Arabi A.

ABSTRACT

Osteoporosis is a major health disorder associated with an increased risk of fracture. Nutrition is among the modifiable factors that influence the risk of osteoporosis and fracture. Calcium and vitamin D play important roles in improving bone mineral density and reducing the risk of fracture. Other vitamins appear to play a role in bone health as well. In this review, the findings of studies that related the intake and/or the status of vitamins other than vitamin D to bone health in animals and humans are summarized. Studies of vitamin A showed inconsistent results. Excessive, as well as insufficient, levels of retinol intake may be associated with compromised bone health. Deficiencies in vitamin B, along with the consequent elevated homocysteine level, are associated with bone loss, decreased bone strength, and increased risk of fracture. Deficiencies in vitamins C, E, and K are also associated with compromised bone health; this effect may be modified by smoking, estrogen use or hormonal therapy after menopause, calcium intake, and vitamin D. These findings highlight the importance of adequate nutrition in preserving bone mass and reducing the risk of osteoporosis and fractures.

Osteoporosis is a major health disorder associated with an increased risk of fracture

Deficiencies in vitamins C, E, and K are also associated with compromised bone health;



Cognitions, Behaviours and Co-Morbid Psychiatric Diagnoses in Patients with Chronic Fatigue Syndrome

ABSTRACT

BACKGROUND:

Specific cognitions and behaviours are hypothesized to be important in maintaining chronic fatigue syndrome (CFS). Previous research has shown that a substantial proportion of CFS patients have co-morbid anxiety and/or depression. This study aims to measure the prevalence of specific cognitions and behaviours in patients with CFS and to determine their association with co-morbid anxiety or depression disorders.

Specific cognitions and behaviours are hypothesized to be important in maintaining chronic fatigue syndrome (CFS).

Method A total of 640 patients meeting Oxford criteria for CFS were recruited into a treatment trial (i.e. the PACE trial). Measures analysed were: the Cognitive Behavioural Response Questionnaire, the Chalder Fatigue Scale and the Work and Social Adjustment Scale. Anxiety and depression diagnoses were from the Structured Clinical Interview for DSM-IV. Multivariate analysis of variance was used to explore the associations between cognitive-behavioural factors in patients with and without co-morbid anxiety and/or depression.

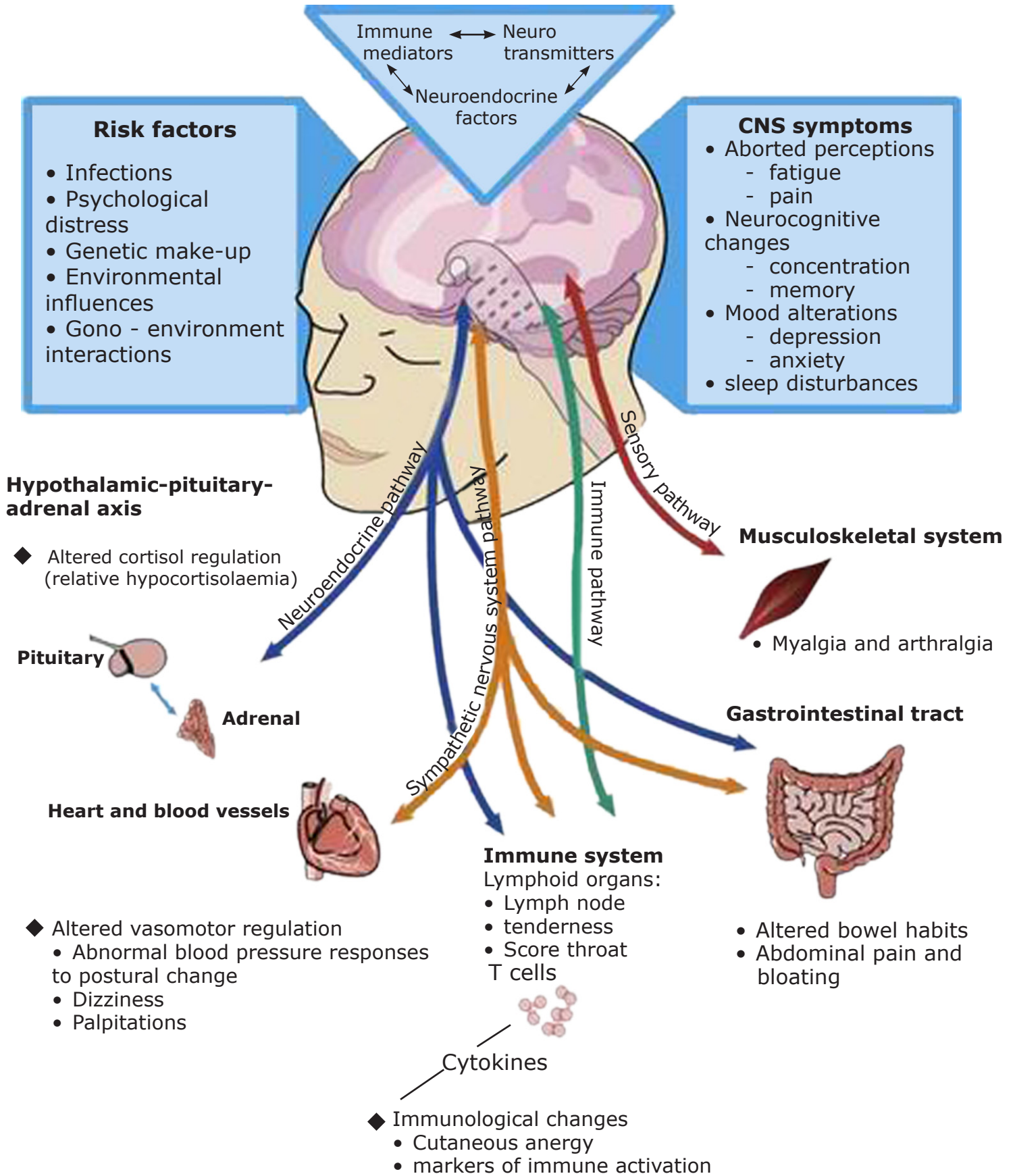
54% had a diagnosis of CFS and no depression or anxiety disorder, 14% had CFS and one anxiety disorder, 14% had CFS and depressive disorder and 18% had CFS and both depression and anxiety disorders.

RESULTS:

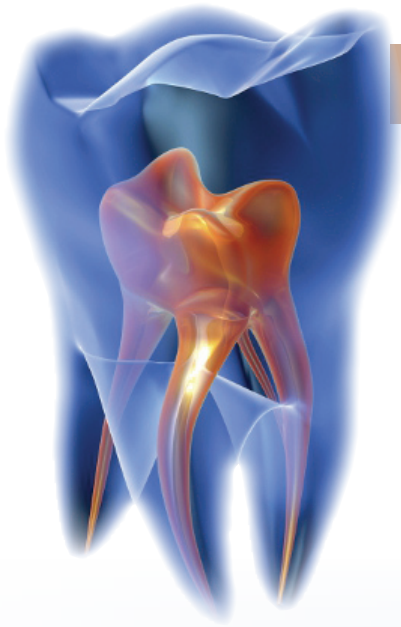
Of the total sample, 54% had a diagnosis of CFS and no depression or anxiety disorder, 14% had CFS and one anxiety disorder, 14% had CFS and depressive disorder and 18% had CFS and both depression and anxiety disorders. Cognitive and behavioural factors were associated with co-morbid diagnoses; however, some of the mean differences between groups were small. Beliefs about damage and symptom focussing were more frequent in patients with anxiety disorders while embarrassment and behavioural avoidance were more common in patients with depressive disorder.

CONCLUSIONS:

Cognitions and behaviours hypothesized to perpetuate CFS differed in patients with concomitant depression and anxiety. Cognitive behavioural



Gerodontology. 2012 Jun;29(2):135-9.



Pulp Sensibility Test in Elderly Patients

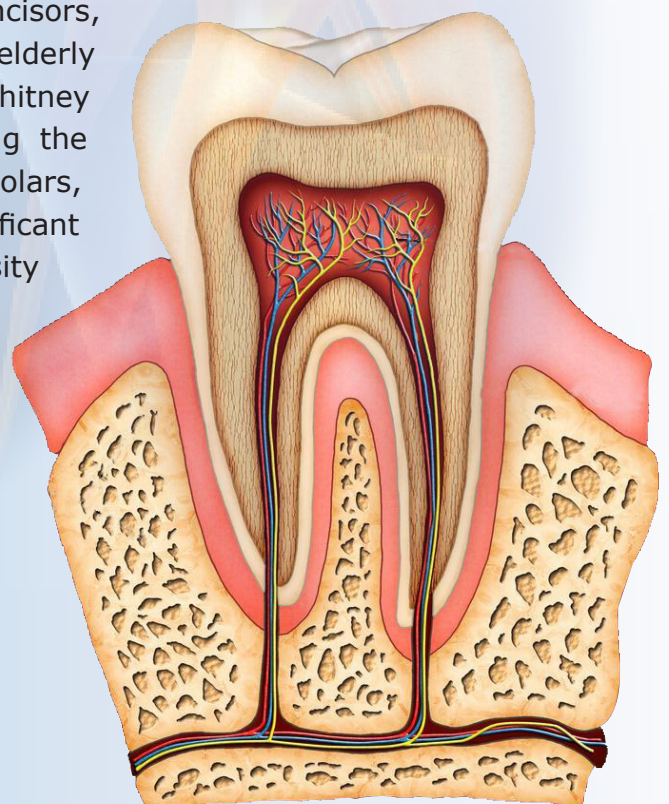
*Farac RV, Morgental RD, de Pontes Lima
RK, Tiberio D, Dos Santos MT.*

ABSTRACT

Pulp sensibility test in elderly patients Background: The ageing process transforms the histological composition of the dental pulp and may affect the response to pulp sensibility tests. Objectives: The aim of this study was to assess the influence of age on pulp response time and on pain intensity. Material and methods: Fifty elderly patients and 50 young patients were selected. Different classes of teeth were evaluated. The pulp sensibility test was performed with a refrigerant spray. The pulp response time was measured in seconds and the pain intensity was assessed by visual analogue scale. Results: The Spearman coefficient was calculated and detect a positive correlation between age and pulp response time for maxillary incisors, premolars, mandibular incisors, and mean ($p < 0.05$). On the contrary, there was a negative correlation between age and pain intensity for maxillary incisors, mandibular incisors, and mean ($p < 0.05$). Also, the results of elderly and young groups were compared by Mann-Whitney test. Significant difference was noted regarding the pulp response time for maxillary incisors, premolars, mandibular incisors, and mean ($p < 0.05$). Significant difference was detected regarding the pain intensity for mandibular incisors only ($p < 0.05$).

CONCLUSIONS:

Pulp response time increases when people get older while pain intensity decreases. There were variations among the classes of teeth.



Management of Haemorrhoidal Disease

Zeitoun JD, de Parades V.

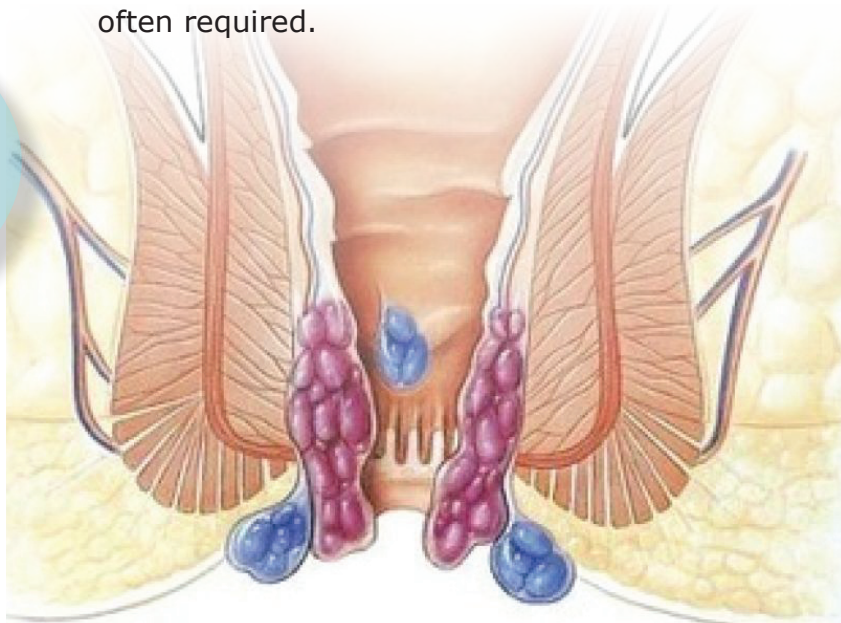
ABSTRACT

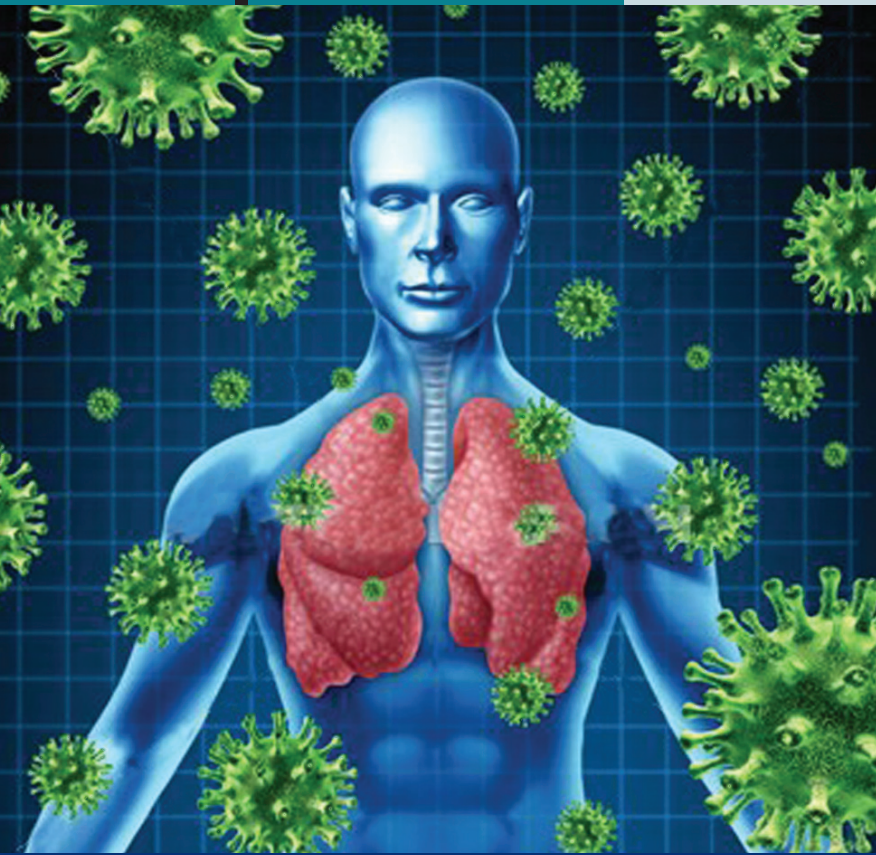
Except for complications, therapeutic strategy for hemorrhoidal disease depends on patient complaint and data from clinical examination. Management is mostly progressive and first aims at releasing symptoms rather than achieving anatomic resilience. In patients with haemorrhoids responsible for insignificant symptoms and with no alteration of quality of life, no treatment is mandatory. Patient complaint, either related to bleeding or prolapse, must prone active management. Medical treatment must be offered as a primary approach in the majority of patients with non-complicated hemorrhoidal disease,

Management is mostly progressive and first aims at releasing symptoms rather than achieving anatomic resilience.

Medical treatment must be offered as a primary approach in the majority of patients with non-complicated hemorrhoidal disease,

followed if necessary by office-based procedure. Surgical treatment is indicated when office-based procedures proved ineffective or immediately after medical treatment failed in patients with Grade IV haemorrhoids. In case of local or general complication, or associated proctologic disease, surgical management is most often required.





AZM directly inhibits MUC5AC secretion from NCI-H292 cells and human nasal epithelial cells. These novel findings may explain the clinical efficacy of AZM in patients with chronic airway inflammation.

Mediators Inflamm. 2012; 2012: 265714.

*Takeshi Shimizu * and Shino Shimizu*

Azithromycin Inhibits Mucus Hypersecretion from Airway Epithelial Cells

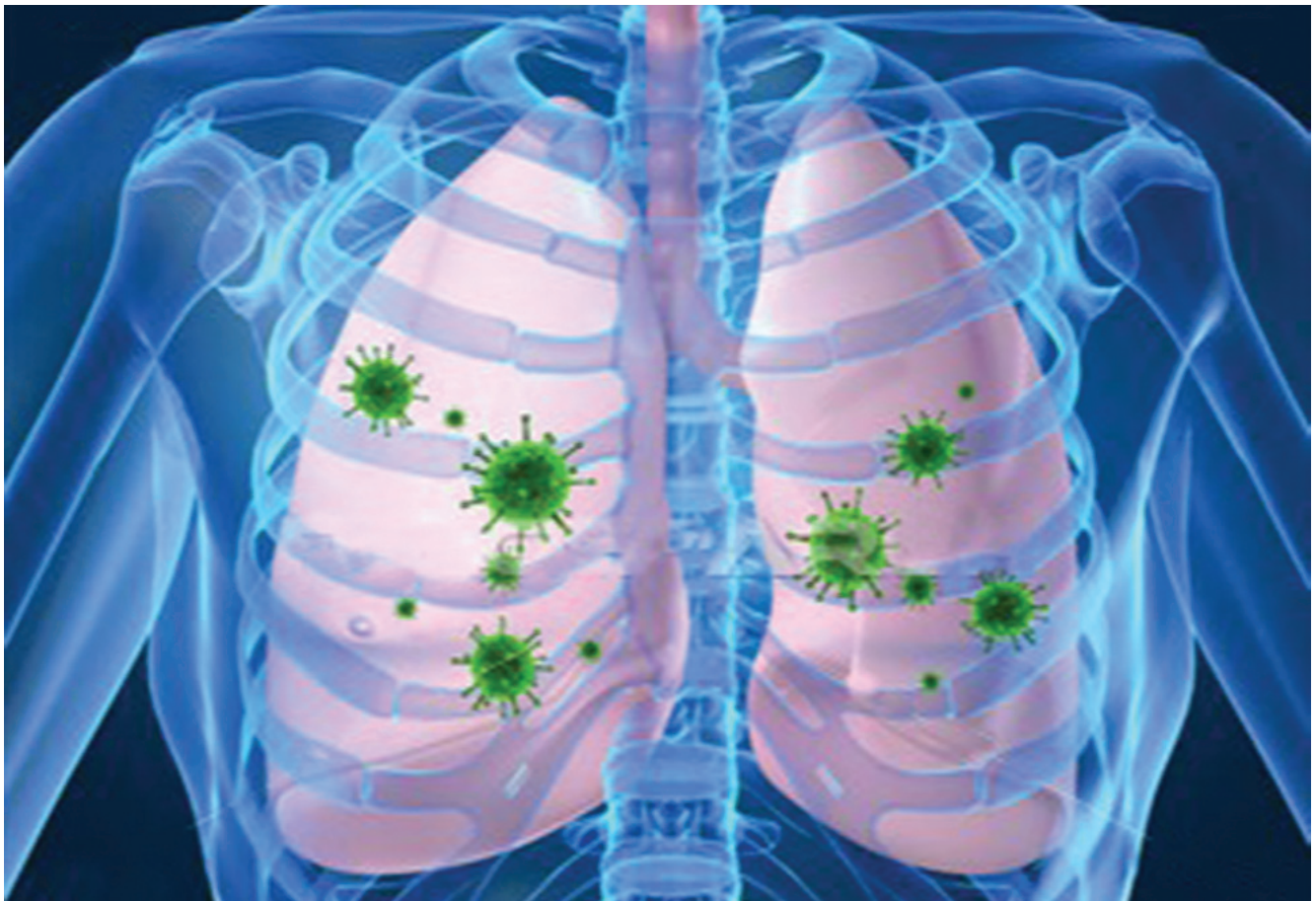
ABSTRACT

To examine the in vivo effects of the 15-member macrolide, azithromycin (AZM), on mucus hypersecretion, we induced hypertrophic and metaplastic changes of goblet cells in rat nasal epithelium by intranasal instillation of ovalbumin (OVA) in OVA-sensitized rats, or by intranasal lipopolysaccharides (LPS) instillation. Oral administration of AZM (5–10 mg/kg) or clarithromycin (CAM, 5–10 mg/kg) significantly inhibited OVA- and LPS-induced mucus production, whereas josamycin (JM) or ampicillin (ABPC) showed no effect. In vitro effects of AZM on airway epithelial cells were examined using NCI-H292 cells and human nasal epithelial cells cultured in air-liquid interface. Mucus secretion was evaluated by enzyme-linked immunosorbent assay using an anti-MUC5AC monoclonal

antibody. AZM or CAM significantly inhibited tumor necrosis factor- α (TNF- α) (20 ng/mL)-induced MUC5AC secretion from NCI-H292 cells at 10^{-6} – 10^{-7} M, whereas JM or ABPC showed no effect. AZM significantly inhibited TNF- α (20 ng/mL)-induced MUC5AC secretion from human nasal epithelial cells at 10^{-4} M. MUC5AC mRNA expression was also significantly inhibited. These results indicate that the 15-member macrolide, AZM, exerts direct inhibitory effects on mucus secretion from airway epithelial cells and that it may be useful for the treatment of mucus hypersecretion caused by allergic inflammation and LPS stimulation.

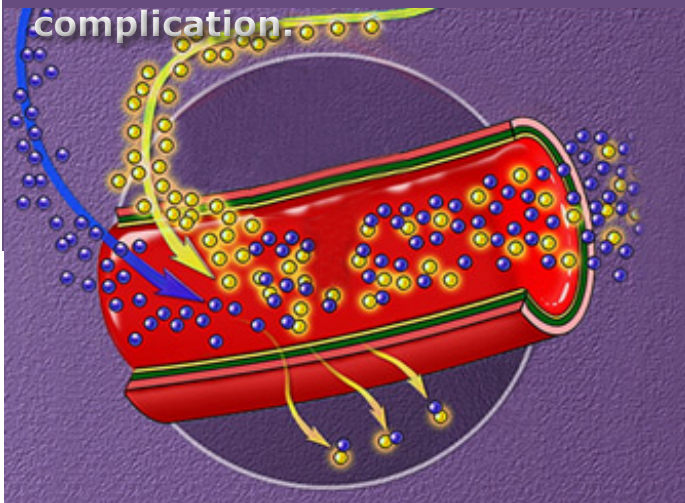
CONCLUSION

We have induced hypertrophic and metaplastic changes of goblet cells in rat nasal epithelium by intranasal challenge with OVA in OVA-sensitized rat and by LPS instillation, and we have demonstrated in this model that AZM inhibits epithelial mucus production produced by allergic inflammation and by LPS stimulation. We have also demonstrated that AZM directly inhibits MUC5AC secretion from NCI-H292 cells and human nasal epithelial cells. These novel findings may explain the clinical efficacy of AZM in patients with chronic airway inflammation.



Effect of Vitamin C Supplementation on Postprandial Oxidative Stress And Lipid Profile In Type 2 Diabetic Patients.

This study suggests that vitamin C supplementation can decrease fasting and postprandial oxidative stress and may prevent diabetes complication.

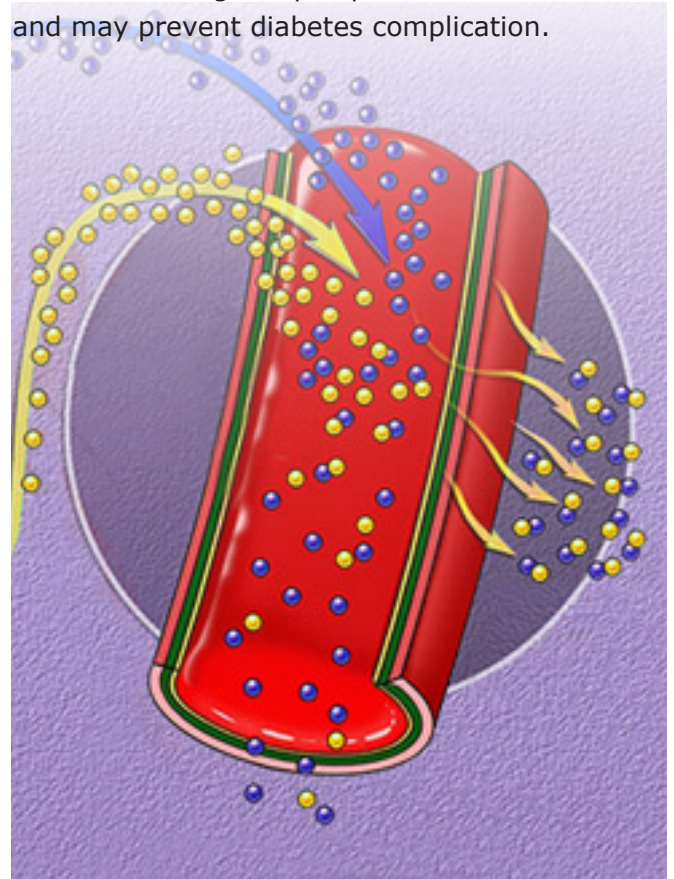


ABSTRACT

Diabetes mellitus is one of the most wide spread endocrine disorders and an important developing health problem in the world. Cardiovascular disease is a common complication of type 2 diabetes. Several risk factors for coronary heart disease cosegregate in type 2 diabetes, including hyperglycemia, hyperlipaemia, increases production of free radical and decrease in antioxidant defense system. In this study we evaluated the effect of vitamin C supplementation on fasting and postprandial oxidative stress and lipid profile in type 2 diabetic patients. 30 patients with type 2 diabetes from Nader Kazemi Clinic, Shiraz, Iran were randomly

Mazloom Z, Hejazi N, Dabbaghmanesh MH, Tabatabaei HR, Ahmadi A, Ansar H.

divided into 2 groups; vitamin C treatment group (1000 mg d⁻¹) and placebo group from May to September 2010. Fasting and postprandial lipid profile and Malondialdehyde (MDA) level were measured at the beginning of the study and after six weeks of supplementation. Data analysis was carried out using Mann-Whitney U test with $p < 0.05$ being significant by SPSS software version 16. The result of the study showed a significantly decrease in fasting ($p = 0.006$) and postprandial MDA ($p < 0.001$) in vitamin C group compare to placebo group but not in lipid profile. This study suggests that vitamin C supplementation can decrease fasting and postprandial oxidative stress and may prevent diabetes complication.



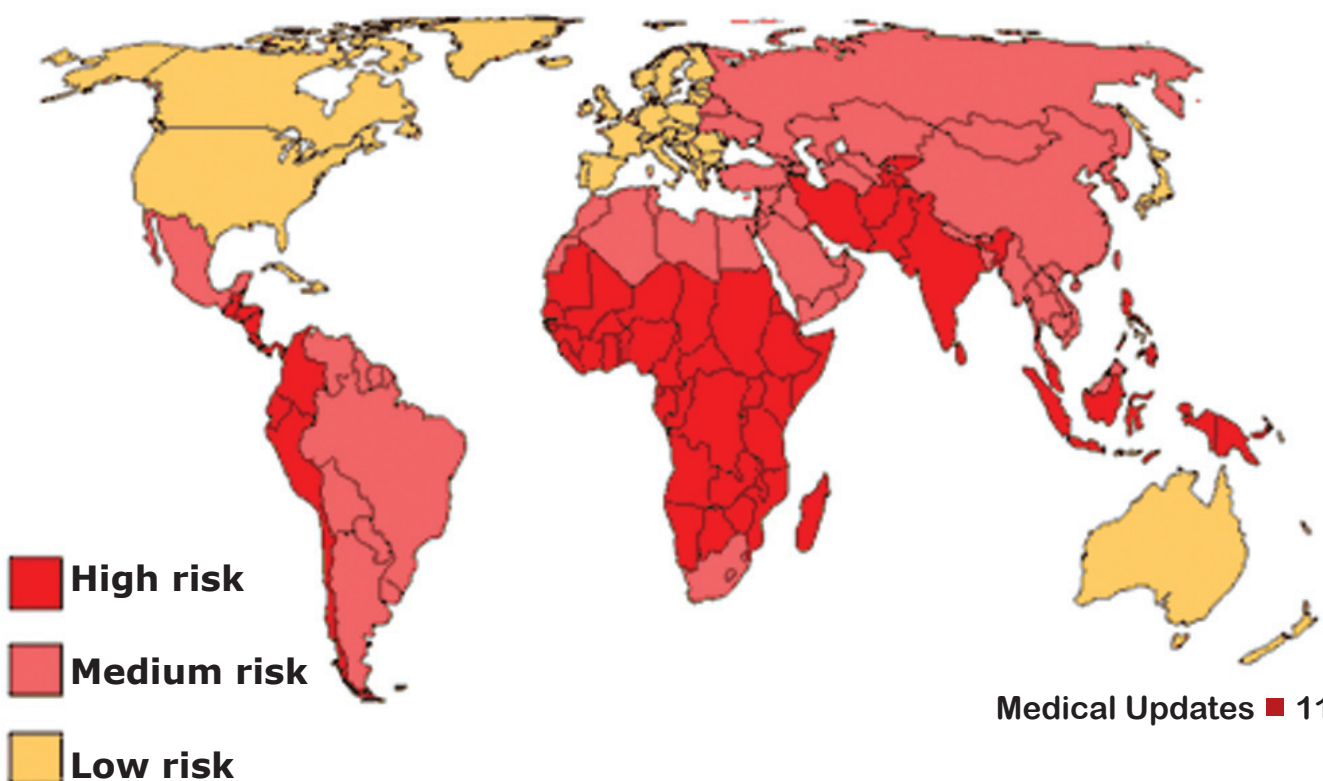
Efficacy and Safety of Azithromycin for Uncomplicated Typhoid Fever: an Open Label Non-Comparative Study

Azithromycin was found to be safe and efficacious for the management of uncomplicated typhoid fever.

ABSTRACT

An open-labelled, non-comparative study was conducted in 117 children aged 2-12 years to evaluate the efficacy and safety of azithromycin (20mg/ kg/day for 6 days) for the treatment of uncomplicated typhoid fever. Of the patients enrolled based on a clinical definition of typhoid fever, 109 (93.1%) completed the study. Mean (SD) of duration of fever at presentation was 9.1(4.5) days. Clinical cure was seen in 102 (93.5%) subjects, while 7 were withdrawn from

the study because of clinical deterioration. Mean day of response was 3.45 ± 1.97 . BACTEC blood culture was positive for *Salmonella typhi* in 17/109 (15.5%) and all achieved bacteriological cure. No serious adverse event was observed. Global well being assessed by the investigator and subjects was good in 95% cases which was done at the end of the treatment. Azithromycin was found to be safe and efficacious for the management of uncomplicated typhoid fever.



Deficiencies in vitamins C, E, and K are also associated with compromised bone health;

54% had a diagnosis of CFS and no depression or anxiety disorder, 14% had CFS and one anxiety disorder, 14% had CFS and depressive disorder and 18% had CFS and both depression and anxiety disorders.

Osteoporosis is a major health disorder associated with an increased risk of fracture

Specific cognitions and behaviours are hypothesized to be important in maintaining chronic fatigue syndrome (CFS).

Pulp response time increases when people get older while pain intensity decreases. There were variations among the classes of teeth.

Medical treatment must be offered as a primary approach in the majority of patients with non-complicated hemorrhoidal disease,

Management is mostly progressive and first aims at releasing symptoms rather than achieving anatomic resilience.

Azithromycin was found to be safe and efficacious for the management of uncomplicated typhoid fever.