

Clippings

❑ Glucocorticoids suppress bone formation, impair growth and induce obesity. In this study the effects of long term treatment with glucocorticoids on bone mineral content in children with glucocorticoid sensitive nephrotic syndrome studied. Dual energy X-ray absorptiometry of the whole body and spine in 60 children and adolescents with nephrotic syndrome and 195 control subjects were performed to determine bone mineral content. Patients had received an average of 23000 mg of glucocorticoids and were shorter and had a greater body mass index than controls. Intermittent treatment with high dose glucocorticoids during growth does not appear to be associated with deficits in the bone mineral content of the spine or whole body relative to age, bone size and degree of maturation. Glucocorticoids induced increases in body mass index were associated with increased whole body bone mineral content of the spine. *N Engl J Med* 2004; 351: 868-875.

❑ Although exogenous surfactant is of proven benefit in the prevention and treatment of the respiratory distress syndrome in infants, its value in treating patients with the acute respiratory distress syndrome (ARDS) has not been established. Whereas, infants with an immature lung have a deficit in surfactant production, patients with ARDS have decreased surfactant production as well as biochemical alterations of endogenous surfactant that impair surface tension lowering properties and decreased surfactant function in distal airways. In these two multicenter, randomized double blind trials involving 448 patients with ARDS from various causes, standard therapy alone was compared with standard therapy plus upto four intratracheal

doses of a recombinant surfactant protein C based surfactant given within a period of 24 hours. The use of exogenous surfactant in a heterogenous population of patients with ARDS did not improve survival. Patients who received surfactant had a greater improvement in gas exchange during the 24 hour treatment period than patients who received standard therapy alone, suggesting the potential benefit of a longer treatment course. *N Engl J Med* 2004; 351: 884-892.

❑ For many common helminthic infections including ascariasis, trichuriasis and schistosomiasis the intensity of infection peaks during childhood and adolescence. In contrast there appears to be considerable variation in the age intensity profile of hookworm infection. Although the hookworm burden may be heavy in children, especially those in Sub Saharan Africa, the most commonly recognized pattern is a steady rise in the intensity of infection during childhood with either a peak or a plateau in adulthood. The observation that the intensity of hookworm infection increases with age has led to the suggestion that hookworms can either evade or suppress host immune responses. Although proper sanitation and footwear are considered important for the control of hookworm, their effect on transmission is frequently either marginal or evident only after decades. The specific treatment of choice for the removal of hookworms from the intestines is a single dose of a benzimidazole anthelmintic either albendazole (400 mg) or mebendazole (500 mg). The global target is by 2010 to provide routine treatment for atleast 75% of all school age children who are at risk for infection using a benzimidazole anthelmintic alone or in conjunction with praziquantel. The rationale for

focusing on schools is that school age children have the highest intensity of ascaris, trichuris and schistosome infections of any age group and schools provide a cost effective way to deliver anthelmintics. *N Engl J Med* 2004; 351: 799-807.

□ Ventricular fibrillation can be the presenting arrhythmia in children with asymptomatic Wolff Parkinson White syndrome. Deaths due to this arrhythmia are potentially preventable. In this randomized study prophylactic radio frequency catheter ablation of accessory pathways was compared with no ablation in asymptomatic children (age range 5 to 12 years) with the Wolff Parkinson White syndrome who were at high risk for arrhythmias. The primary end point was the occurrence of arrhythmic events during follow up. It was found that cumulative rate of arrhythmic events was lower among children at high risk who underwent ablation than among those at high risk who did not. In both the ablation and the control groups, the independent predictors of arrhythmic events were the absence of prophylactic ablation and the presence of accessory pathways. *N Engl J Med* 2004; 351: 1197-1205.

□ Available treatments for hepatitis Be antigen (HbeAg) negative chronic hepatitis B are associated with poor sustained responses. As a result, nucleoside and nucleotide analogues are typically continued indefinitely, a strategy associated with the risk of resistance and unknown long term safety implications. In this study the efficacy and safety of peginterferon alfa-2a plus placebo, peginterferon alfa-2a plus lamivudine and lamivudine alone was studied in HbeAg negative chronic hepatitis B patients. Patients were treated for 48 weeks and followed for an additional 24 weeks. It was found that patients with HbeAg negative chronic hepatitis B had significantly higher rates of response, sustained for 24 weeks after the cessation of therapy with peginterferon alfa-2a than with lamivudine. The addition of lamivudine to peg interferon alfa-2a did not improve post therapy response rates. *N Engl J Med* 2004; 351: 1206-1217.

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