Clippings

❑ The incidence and mortality of group B streptococcal disease in the United Kingdom and Republic of Ireland are largely unknown. Cases of invasive group B streptococcal disease in infants younger than 90 days occurring between 1 Feb 2000 and 28 Feb 2001 were identified through surveillance involving pediatricians, microbiologists and parents. A total of 568 cases were identified, giving an incidence of 0.72 per 1000 live births (95% CI 0.66 - 0.78). The incidence for early onset disease (n = 377) was 0.48 per 1000 (0.43 - 0.53) and for late onset disease (n = 191) was 0.24 per 1000 (0.21-0.28). Risk factors could be identified in 218 (58%)cases of early onset disease. Overall there was 9.7% mortality. This study clearly highlights that invasive group B streptococcal disease is common in early infancy, with identifiable risk factors in over 50% cases and having a large mortality. (Lancet 2004; 363: 292-294).

❑ What is the perinatal outcome of singletons and twins after assisted conception? A systematic review of controlled studies published between 1985-2002 done to compare the perinatal outcome of singleton and twin pregnancies between natural and assisted conceptions. Twenty five studies were identified of which 17 had matched and 8 had non matched controls. The main outcome measures studied were incidence of preterm births, very low birth weights, small for gestational age, caesarean section, admission to neonatal intensive care units, and perinatal mortality. For singletons, studies with matched controls indicated a relative risk of 3.27 (95% confidence interval 2.03 to 5.28) for very preterms (<32 weeks), and 2.04 (1.80 to 2.32) for preterms (<37 weeks) birth in pregnancies after assisted conception. For very low birth weight (< 1500 g) relative risks were 3.00 (2.07 to 4.36), for low birth weight (< 2500 g) 1.70 (1.50 to 1.92), 1.40 (1.15 to 1.71)for small for gestational age, 1.54 (1.44 to 1.66)for cesarean section, 1.27 (1.16 to 1.40) for admission to a neonatal intensive care unit and 1.68 (1.11 to 2.55) for perinatal mortality. Results of the non-matched studies were similar. In matched studies of twin gestation, relative risks were 0.95 (0.78 to 1.15) for very perterm births, 1.07 (1.02 to 1.13) for preterm births, 0.89 (0.74 to 1.07) for very low birth weight, 1.03 (0.99 to 1.08) for low birth weight, 1.27 (0.97 to 1.65) for small for gestational age, 1.21 (1.11 to 1.32) for cesarean section, 1.05 (1.01 to 1.09) for admission to neonatal intensive care units and 0.58 (0.44 to 0.77) for perinatal mortality. The non-matched studies showed similar results. To conclude singleton pregnancies from assisted reproduction had a significantly worse perinatal outcome than non-assisted singleton pregnancies but this was less so for twin pregnancies. In twin pregnancies, perinatal mortality was 40% lower after assisted compared with natural conception (BMJ 2004; 328 (7434): 261).

❑ Asthma self -management plans includes doubling the dose of inhaled corticosteroid when the condition deteriorates improves asthma control. Whether doubling the dose of corticosteroid in isolation is effective is unknown. A randomized controlled trial to investigate the effects of doubling the dose-inhaled corticosteroids when asthma deteriorates was undertaken. 390 individuals with asthma who were at risk of an exa-cerbation monitored their asthma symptoms for 12 months. When peak flow or symptoms started to deteriorate participants added an active or placebo corticosteroid inhaler to their usual

corticosteroid for 14 days to produce a doubling or no change in dose. The primary outcome was the number of individuals starting oral prednsolone in each group. During 12 months 207 (53%) started their study inhaler and 46 (12%) started prednisolone - 22 (11%) of 192 and 24 (12%) of 198 in the active and placebo groups respectively. The risk ratio for starting prednisolone was therefore 0.95 (95% CI 0.55-1.64, p = 0.8). To conclude there was little evidence to support the widely recommended intervention of doubling the dose of inhaled corticosteroid when asthma control starts to deteriorate. More controlled studies in children are required to substantiate the same (Lancet 2004; 363: 271-275).

❑ What is the role of artesunate combinations for treatment of malaria? A meta-analysis of 16 randomised trials (n = 5948) was done to see if addition of artesunate to standard treatment of Plasmodium falciparum decreased treatment failure and transmission potential. For all trials combined, parasitological failure was lower with 3 days of artesunate at day 14 (OR 0.20, 95% CI 0.17-0.25, N = 4504) and at day 28. Parasite clearance was significantly faster (rate ratio 1.98, 95% CI 1.85 - 2.12, N = 3517) with artesunate. In participants with no gametocytes at baseline artesunate reduced gametocyte count on day 7 with larger effects at days 14 and 28. Adding artesunate for 1 day (six trials) was also associated with fewer failures by day 14 and day 28. The occurrence of serious adverse events did not differ significantly between artersunate and placebo. To conclude addition of 3 days of artesunate to standard antimalarial treatments substantially reduced treatment failure, recrudescence and gametocyte carriage (Lancet 2004, 363: 9-17).

❑ Does cognitive ability decline in mid-life as compared to that in childhood? A longitudinal population based birth cohort study comparing of 2058 men and women born in 1946 was undertaken. Ability in adulthood was measured by AH 4 and test of verbal comprehension at age 15 years. Ability in adulthood was measured by national adult reading test (NART) at age 53 years. Outcome measures were decline in memory and speed and concentration from age 43 to 53 years. The results showed ability in childhood was significantly and negatively associated with decline in memory and search speed independent of educational attainment, occupational social class and a range of health indicators. The adult reading test was also significantly and negatively associated with decline in these outcomes (for memory beta = 0.21, $p < 0.001$, for men; 0.17, $p < 0.001$, for women ; and for search speed beta = 0.05 for men, 0.10 p = 0.008 for women) independent of educational attainment, social class and childhood ability. To conclude ability in childhood can protect against cognitive decline in mid life and beyond (BMJ 2004, Feb 4).

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