Uric acid and intelligence

Sir, It was recently claimed that the superior intellectual powers of the higher primates may be to some extent a consequence of high uric acid levels. This is to let you know that we had the opportunity some time ago to investigate the correlations between serum uric acid level and 'intelligence.' We studied 270 children aged 0 to 16 years (including subjects with epilepsy, with behaviour problems, with mental deficiency, and overweight subjects). The results lend substantial support to the hypothesis that serum uric acid is related to intellectual level in the paediatric age group (mean serum uric acid level in mentally retarded children =3.98, in 'overgifted' children =4.77).

We may add that in our study we decided to investigate a number of children in order to exclude the many variables (so often stress in adults, eating habits, etc.) which could play an important role in the uric acid level in the adult population. In our search of the medical world literature we could not find any other investigator who had studied before us the same subject in the paediatric age group.

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Reference

Streptococci and reactive arthritis

Sir, Reactive arthritis is a term reserved for a sterile polyarthritis following a variety of infections. In patients with the HLA B27 antigen the syndrome commonly includes sacroiliitis and a symmetrical, predominantly lower limb arthritis. It has been described as a consequence of shigella, chlamydia, and yersinia infections. We have recently seen a case of reactive arthritis in an HLA B27 positive individual following a streptococcal throat infection.

A 22-year-old woman presented to her general practitioner in January 1980 with a short history of a sore throat. A clinical diagnosis of tonsillitis was made and the patient given penicillin. Although her sore throat rapidly improved, within 4 weeks she had developed a progressive, symmetrical polyarthritis with painful swelling of her knees and ankles. She complained of stiffness and pain in the low back. There was no history of urethritis, conjunctivitis, or gastrointestinal disturbance.

On examination she was afebrile, with no rashes or heart murmurs. She had evidence of a tender arthropathy, with synovitis and effusions in both knees and ankles and tenderness over both sacroiliac joints. Investigations revealed an erythrocyte sedimentation rate of 100 mm in the first hour. The initial ASO titre was 8330 units/ml. Rheumatoid factor and antinuclear factor were both negative. Radiology of joints showed no abnormality. The patient was HLA B27 positive.

Treatment consisted of anti-inflammatory agents, but improvement was slow. There were a number of exacerbations over a 12-month period, one requiring corticosteroid therapy. Throughout this period sacroiliac pain remained a prominent feature.

The association between the reactive arthritis, sacroiliitis, and streptococcal throat infection may be coincidental. However, the timing, the pattern of the disease, and the lack of other obvious triggering factors suggest that streptococci may need to be considered in the list of infections known to precipitate this condition.

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References

Allopurinol effect on renal function in gout

Sir, Many of your readers must regret that you no longer publish the discussion of papers which have been read to the Heberden Society. This was brought home to me by