Preventative treatment with cranberry extract of vesico-ureteral reflux (VUR) in children—preliminary report

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Introduction:

Recurrent infections of the urinal tract, often associated with fever, are common in children suffering from reflux of urine from the bladder to the urether (VUR). Such infections may also leave scars in the kidney parenchyma and cause irreversible damage to kidney functions. In these cases preventive long-range antibiotic treatment is therefore recommended, then waiting for the reflux complaint to eventually pass away spontaneously. Several studies were published demonstrating the efficacy of cranberry treatment for prevention of recurrent infections in the urinary tract in adults, but to the best of our knowledge such treatment has not yet been tested on children with VUR.

Materials and methods:

During a period of 18 months 35 children were collected of average age 37 months (range 12-120 months). They included 6 males and 29 females, all suffering from reflux. Three children had reflux degree 1, eleven children degree 2, 16 children degree 2, 16 children degree 3, 4 degree 4 and one child had degree 5. 34 of them had received preventive antibiotic treatment and were switched to preventive treatment with a cranberry preparation—Cran-Life, containing 250 mg cranberry extract and 60 mg vitamin C. Patients aged up to 7 years were given one capsule and those over 7 years of age 2 capsules per day. The children were invited for medical examination once in three months to obtain result of urine sample culture and general urine examination. At that time the children returned the remaining capsules which serve as index of the take up of the preparation.

Results:

Average follow-up 7.3 months (range 1-15 months). Six children dropped out of the study: 2 because of inflammation which necessitated switch over to antibiotic treatment and 4 on account of lack of cooperation by the family. The remaining 29 children are still being treated with cranberry and do not suffer from any infection.

Summing up:

From the preliminary results of this study it may be concluded that the cranberry preventive treatment is effective in hindering urinary tract inflammations and pyelonephritis in children suffering from VUR. These results are preliminary and the children will be followed up for two years from the day of start of study.