AB - OBJECTIVE : To investigate the relationship between the expression of Th1 / Th2 type cytokines and the effect of interferon - alpha therapy . METHODS : Th1 / Th2 type cytokines were assayed by enzyme - linked immunosorbent assay (ELISA) and reverse transcription polymerase chain reaction (RT - PCR) on 23 patients with chronic hepatitis B who were treated with interferon - alpha . RESULTS : Levels of IFN - gamma in the supernatant of peripheral blood mononuclear cells (PBMC) cultures from the patients with hepatitis B were slightly lower than those of controls (P = 0.07) . However , the levels of IL - 4 were higher than those of controls (P = 0.01) . Cytokines measurements during IFN - alpha treatment showed a trend to decreasing levels of IL - 4 at 4 , 12 , and 24 weeks . Levels of IFN - gamma were slightly increased following IFN - alpha treatment (P = 0.09) . In patients with a complete response to IFN - alpha , the levels of IFN - gamma were higher at 24 weeks following IFN - alpha treatment than that of pre - treatment (P = 0.04) , and the levels of IL - 4 decreased markedly at 12 and 24 weeks (P = 0.02 , 0.03 , respectively) . mRNA expression positively correlated with the level of Th1 / Th2 type cytokines in the supernatant . CONCLUSION : The expression of Th2 type cytokines is predominant in patients with chronic hepatitis B . Interferon - alpha therapy can modulate the balance of Th1 / Th2 type cytokines , and this is related to its clinical effect . Levels of Th1 / Th2 type cytokines could be a predictor of clinical response during Interferon - alpha treatment . AD - South Hospital , First Military Medical University , Guangzhou 510515 , TI - Involvement of BMP - 2 signaling in a cartilage cap in osteochondroma . AB - This study describes the distributions of bone morphogenetic protein (BMP) - 2 as well as mRNAs for BMP receptor type IB (BMPRIB) . collagen types II (Col II) and III (Col III) in a growing AMPPPP quot ; cartilage cap AMPPPP quot ; of osteochondroma . In situ hybridization and immunohistochemical study were performed using histological sections obtained during surgery . BMP - 2 was detected in mesenchymal cells in the outer fibrous layer and chondrocytes in the inner cartilaginous matrix , positive for Col III and Col II , respectively . BMPRIB mRNA was distributed in chondrocytes . This is the first study to provide observational evidence of the involvement of BMP - 2 signaling in the pathogenesis of cartilage cap of osteochondroma . and suggests the role of BMP - 2 in the growth of cartilage cap in osteochondroma . AD - Department of Orthopaedic Surgery , Osaka University Medical School , Suita , TI - The molar ratio of serum retinol - binding protein (RBP) to transthyretin (TTR) is not useful to assess vitamin A status during infection in hospitalised children . AB - OBJECTIVE : To assess the usefulness of the molar ratio of serum retinol - binding protein (RBP) to transthyretin (TTR) to determine vitamin A (VA) status during infection . DESIGN : We took advantage of previously collected data during a randomised double - blind , placebo - controlled clinical trial to conduct a secondary analysis of the RBP / TTR ratio and its relationship to infection and VA status . In this clinical trial , children were randomly assigned to one of three groups and received either one single oral high dose of VA (200 000 IU) on the day of admission and subsequently a placebo daily until discharge or daily oral low doses of VA (5000 IU) from admission until discharge or a placebo daily from admission until discharge . SETTING : Lwiro pediatric hospital , Province of South Kivu , Democratic Republic of Congo . SUBJECTS : A total of 900 children aged 0 - 72 months hospitalised consecutively between March 1994 and March 1996 . MAIN OUTCOME MEASURES : RBP / TTR molar ratio after 7 days hospitalisation . RESULTS : After 7 days hospitalisation , molar RBP : TTR ratio (mean+ / - s.d .) of infected children (C - reactive proteins GTTTTT 10 mg / l) was 0.67 + / - 0.31 in the high - dose group (n = 81) , 0.74 + / - 0.44 in the low dose group (n = 71) and

0.73 + / - 0.39 in the placebo group (n = 81) . These values did not differ significantly (one - way ANOVA P = 0.472) . In patients with baseline serum retinol concentrations LTTTTT 0.70 micromol / l , changes in RBP : TTR ratio between admission and day 7 were not statistically different in the three groups (one - way ANOVA P = 0.548) . CONCLUSIONS : In this population of malnourished hospitalised children , molar RBP : TTR ratio does not appear to be useful to assess VA status during infection . SPONSORSHIP : Our research was partially supported by a grant from the Fonds de la Recherche Scientifique et Medicale (contract 3.4505.94) and the David and Alice Van Buuren Foundation . AD - School of Public Health , Universite Libre de Bruxelles , Brussels , Belgium . TI - Role of cyclin - dependent kinase inhibitors in the growth arrest at senescence in human prostate epithelial and uroepithelial cells . AB - Cellular senescence has been proposed to be an in vitro and in vivo block that cells must overcome in order to immortalize and become tumorigenic . To characterize these pathways , we focused on changes in the cyclin - dependent kinase inhibitors and their binding partners that underlie the cell cycle arrest at senescence . As a model , we utilized normal human prostate epithelial cell (HPEC) and human uroepithelial cell (HUC) cultures . After 30 - 40 population doublings cells became growth - arrested in G0 / 1 with a threefold decrease in Cdk2 - associated activity , a point defined as pre - senescence . Temporally following this growth arrest , the cells develop a senescence morphology and express senescence - associated beta - galactosidase (SA - beta - gal) . Levels of p16 (INK4 a) and p57 (KIP2) rise in HUCs during progressive passages , whereas only p16 increases in HPEC cultures . The induced expression of p57 , similar to p16 , produces a senescent - like phenotype . pRB , cyclin D , p19 (INK4 d) and p27 (KIP1) decrease in both cell types . We find that p53 , p21 (CIP1) and p15 (INK4 b) are transiently elevated in HPECs and HUCs at the pre - senescent growth arrest , then return to low proliferating levels at terminal senescence . Analysis of p53 , p21 (CIP1) , p15 (INK4 b) , p16 (INK4 a) , and p57 (KIP2) reveals altered expression in immortalized , non - tumorigenic HPV16 E6 and E7 prostate lines and in tumorigenic prostate cancer cells .