–0.02, p = 0.042), low vision in both eyes (difference = –0.02, p = 0.041), and blindness in both eyes (difference = –0.10, p < 0.001) had lower EQ-5D score than those without visual impairment. Singapore Indians with low vision in both eyes (difference = –0.03, p = 0.0081), low vision in one eye and blindness in the other eye (difference = –0.09, p = 0.001), and blindness in both eyes (difference = –0.16, p = 0.0004) had lower EQ-5D score than those without visual impairment. After adjusted for age, gender and co-morbidities, none of the 5 eye conditions was associated with re-duction in EQ-5D scores in Malays or Indians, except that Indians with cataract had lower EQ-5D scores than those without cataract (difference = –0.02, p = 0.0431).

CONCLUSIONS: Health burden is associated with visual impairment, but not with the presence of the eye conditions. Vision problems pose more health burden to Indians than Malays in Singapore.

URINARY/KIDNEY DISORDERS - Clinical Outcomes Studies

PUK1 DIURETIC ACTIVITY OF AQUEOUS EXTRACT OF BOSWELLIA SERRATA ROXB. OLEO GUM IN NORMAL ALBINO RATS

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OBJECTIVES: To evaluate the effect of aqueous extract of Boswellia serrata Roxb oleo gum on urinary electrolytes, pH and diuresis in normal albino rats.

METHODS: Oleo gum weighing 500g was soaked in hot boiling water (1L) at room temperature for 3 days with occasional shaking. Filtrate was evaporated on rotary evaporator to a thick, semi-solid pasty mass of dark brown color, which was dissolved in distilled water to make 10% saline for in-vitro and in-vivo experimentation. Phytochemical analysis was carried out for alkaloids, saponins, anthraquinones, flavonoids and tannins. For in-vivo activity, five groups of with six animals in each were administered normal saline (10 ml/kg, i.p.), Furosemide (10mg/kg) and crude extracts of Boswellia serrata oleo gum in doses of 10, 30 and 50 mg/kg of body weight, respectively. Toxicological effect of plant was undertaken in rats at a dose of 3000mg/kg. Data was expressed as mean ± SEM and analyzed using Graph Pad Prism (Graph PAD, San Diego, USA). Student t-test was applied for data normally distributed and values < 0.05 were considered significant.

Phytochemical screening of Boswellia serrata Roxb confirmed the presence of saponins and flavonoids. Furosemide induced significant diuresis and electrolytes (Na + and K +) excretion while plant extracts increased urinary output and electrolytes excretion in a dose-dependent manner. Diuretic index of test groups were 36, 20 and 2.9, respectively, while Losipich value also attest significant diuretic activity in dose dependent manner. Urinary pH remained unchanged during the course of the study whereas, no lethality was observed at the dose of 3000mg/kg.

CONCLUSIONS: Aqueous extract of Boswellia serrata oleo gum administrated partic-u larly at the dose of 50mg/kg significantly induced water and electrolytes with no signs of toxicity.

URINARY/KIDNEY DISORDERS - Cost Studies

PUK2 ECONOMIC BURDEN OF HEMODIALYSIS AND PERITONEAL DIALYSIS IN A TERTIARY HOSPITAL IN CHINA

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OBJECTIVE: To examine the economic burden associated with hemodialysis (HD) and continuous ambulatory peritoneal dialysis (CAPD) among patients with end-stage renal disease (ESRD) and treated in a tertiary hospital in China.

METHODS: From Sept 2004 to Jan 2005, adult patients on HD or CAPD for at least 6 months were recruited. Resource utilization and costs were collected by medical records review and patient survey. The economic burden was divided into direct costs including medical (diagnosis, drugs, lab, and inpatient) and nonmedical (transportation, hired caregivers, and special nutritional products) and indirect costs due to productivity loss (human capital approach). The annualized costs expressed in 2010 Yuan(¥) were calculated respectively. Covariates including patient’s demograph-ics, hospital length of stay, concomitant medications, and comorbidity conditions were considered in the binary logistic regression to compare the AHE between HD and non-CAPD.

RESULTS: A total of 149 eligible individuals with HD were identified from 2006 to 2008, of whom 165 (17.5%) were HD cases with a mean age of 54 years (95% CI: 47.013–61.987) and 8.4 years (95% CI: 7.260–9.564) of renal failure duration. The monthly HD costs were ¥10,403 (44,419)/¥90,262 for HD and ¥79,859 (22,210)/¥77,681 for CAPD (p < 0.0001).

CONCLUSIONS: Patients received HD incurred more direct costs compared to patients undergoing CAPD. The findings of this study may help understand the disease burden and establish cost-effective treatment modalities in ESRD from Chinese societal per-spective.