

reactive nitrogen species. However, the significant decrease in SOD and vitamin C levels in patients with significant glomerulonephritis might be the result of inactivation of enzyme by reactive oxygen species, could have been generated in excessive amount due to the rapid proliferation of the glomerular cells (mesangial cells, endothelial cells and podocytes) which are a source of ROS or could be due to infiltration of the macrophage and the neutrophils in the patients with significant change glomerulonephritis. Superoxide dismutase inactivation by hydrogen peroxide (H_2O_2), a dismutation product of O_2 through destruction of histidine residue has been reported by Bray and Cockle. Like in present study, significant increase in oxidative stress also has been supported by various other studies: Markan S et al⁴ reported that mean serum MDA levels were significantly higher ($p < 0.05$) and lower SOD levels ($P < 0.05$) in patients with proliferative glomerulonephritis (MPGN and RPGN) as compared to non proliferative glomerulonephritis (MCD, MGN and FSGS).

Kuo HT et al¹⁸ also reported increased plasma malondialdehyde (MDA) levels in the patients with FSGS as compared to patients with MCD which were associated with the degree of glomerulosclerosis, suggesting that oxidative stress occurs early and may play an important role in the pathogenesis of glomerulosclerosis. Hung Chun C et al¹⁹ reported that plasma glutathione peroxidase levels were significantly lower (both $p < 0.01$) in FSGS patients than in either MCD patients or normal control subjects.

From the observations made in this study, it can be concluded that oxidative stress levels were significantly higher in idiopathic glomerulonephritis; the levels were much higher in significant change glomerulonephritis (membranous glomerulonephritis, membranoproliferative glomerulonephritis, mesangiol proliferative glomerulonephritis and focal segmental glomerulosclerosis) as compared to minimal change disease. Suggesting that more is the histopathological damage, higher were the levels and vice versa. Also the oxidative stress difference in different histopathological types can be used for clinicopathological correlation and perhaps is a prognostic indicator in different histopathological types. Thus future research should focus on decreasing oxidative stress by using various antioxidants, to halt the disease process and improve survival.

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LITERATURE REVIEW

Initiation of dialysis at higher GFRs: Is the apparent rising tide of early dialysis harmful or helpful?

Steven Jay Rosansky et al. *Kidney International* 2009;76,257-261.

Over the past decade a trend of increasing estimated glomerular filtration rate (eGFR) at the initiation of dialysis for treatment of end-stage renal disease (ESRD) has been noted in the United States. In 1996, only 19% of patients began dialysis therapy with an eGFR of greater than 10 ml/min/1.73m² (denoted as 'early start'), but by 2005 the fraction of early start dialysis patients had risen to 45%. This review examines US dialysis data, national guidelines, and publications relevant to the early start phenomenon. It is not known whether early start of dialysis is beneficial, harmful or neutral with respect to the outcome of dialysis treatment for ESRD. Available data indicate that mortality while on dialysis therapy may be higher in those subjects with early start. Comorbidities present at the time of dialysis initiation do not appear to be a major driving force for early start patients. As well, residual kidney function in these patients is a major contributor to total urea or creatinine clearance. This can be a positive factor for patient outcomes and might be compromised by early start. Finally, we estimate the dollar cost of early start to the US Medicare-supported ESRD program. Properly designed, prospective and randomized studies may help to clarify the benefit or harm of early start of dialysis for ESRD.

Check-list

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- (ix) Photographs/figures in envelope, each marked figure number on reverse with legends on separate sheet, numbers not to exceed 4 in original, 2 in case report.
- (x) Statement signed by all authors regarding adherence to Standard ethical guidelines prescribed by ICMR 2000.

can be used. After placement of an 18 gauge intravenous cannula, anesthesia is induced; The conduct of the anaesthetic is aimed at obtaining good operating conditions for the surgeon; to this end a little "head up" position for the operating table and the maintenance of a hypotensive technique is employed.

POSTOPERATIVE CARE

After Stage I, a conformer is often in place over the buccal mucous membrane and daily glass rodding is carried out to the fornices to keep them open. The patient uses chlorhexidine and nystatin mouth washes.

Post Stage II, Diamox, steroids and antibiotics are continued. The optic is cleaned and the health of the buccal mucous membrane monitored. The skin sutures are removed after 5 days and the patient is admitted for 1 week for each stage.

FOLLOW UP VISITS

The follow up is life long and at weekly intervals for one month, then monthly for three months then every two months for six months, then every four months.

If stable then follow up can be at longer intervals possibly shared with the referring ophthalmologist.

At the follow up visits the vision is checked, unaided and with correction and pinhole, and a refraction performed. The intraocular pressure is checked digitally, the lids examined, the buccal mucous membrane assessed, including colour, dryness and presence of any areas of thinning or laceration. The optical cylinder is examined specifically looking at the cement, seeing if there is tilting or lengthening and the presence of a retroprosthetic membrane.

The stability of the optical cylinder is also tested by prodding with a cotton tipped stick. Fundoscopy is carried out to check the optic disc and macula, B-Scan to detect early peripheral detachments and visual field assessments are made 6 monthly for diagnosis and monitoring glaucoma. Resorption of the bone may be assessed clinically by palpating the mass and dimensions of the lamina, and radiologically using spiral CT, MRI or electron beam tomography, degeneration can affect statistical results for visual improvement.

CONCLUSION

OOKP surgery is complex and requires meticulous care at each step to ensure the overall success rate. Therefore, surgeons must not attempt to provide a service without first having undergone adequate training. Oral structures have to be sacrificed. All patients experience glare and a restricted visual field. The cost of OOKP surgery is high and formal cost benefit analysis has confirmed its cost effectiveness (un published data) Although it is far from perfect, modern OOKP surgery is the only hope for restoring sight in the long term for desperate cases of corneal blindness not amenable to conventional corneal surgery.

RECOMMENDED READING

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LITERATURE REVIEW

Renal outcome in patients with congenital anomalies of the kidney and urinary tract

Sanna-Cherchi et al *Kidney International* 2009,76,528-533

Congenital Anomalies of the Kidney and Urinary Tract (CAKUT) are a major cause of morbidity in children. We measured the risk of progression to end-stage renal disease in 312 patients with CAKUT preselected for the presence of anomalies in kidney number or size. A model of dialysis-free survival from birth was established as a function of the renal CAKUT categories of solitary kidney; unilateral and bilateral hypodysplasia; renal hypodysplasia associated with posterior urethral valves; and multicystic and horseshoe kidney. Cox regression analysis took into account the concomitant presence of vesicoureteral reflux, year of diagnosis, and time-varying values of serum creatinine, proteinuria, and hypertension. By 30 years of age, 58 patients had started dialysis, giving a yearly incidence of 0.023 over a combined 2474 patient risk years. The risk for dialysis was significantly higher for patients with a solitary kidney or with renal hypodysplasia associated with posterior urethral valves (hazard ratios of 2.43 and 5.1, respectively) compared to patients with unilateral or bilateral renal hypodysplasia, or multicystic or horseshoe kidney, and was independent of other prognostic factors. Our study shows that sub-clinical defects of the solitary kidney may be responsible for a poorer prognosis compared to more benign forms of CAKUT. Prospective studies are needed to validate these results.

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