

## Is surgical management of cataract and glaucoma patients in Yemen changing?

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**A**ge related cataract is the leading cause of blindness in Yemen and all over the world.<sup>1</sup> Cataract surgery techniques, however, have been improving over the years. In Yemen, eye doctors used to treat cataract patients using intracapsular techniques. Not until early 1990 when extracapsular technique was introduced. Intraocular lens implantation was also introduced at the same period but it was used in very few eye centers. Nowadays, small incision phacoemulsification technique with foldable intraocular lens implantation is the standard procedure for cataract surgery all over the world and some eye centers in Yemen. This technique was introduced only recently.

Glaucoma affects 0.5-1% of the population above the age of 40 years and is a common cause of blindness.<sup>2</sup> Cairns<sup>3</sup> in 1968 described trabeculectomy and subsequently it remains the most commonly performed glaucoma filtration procedure. There has been a debate regarding the timing of trabeculectomy in glaucoma patients. Advocates of primary surgery report success rates of approximately 90%,<sup>2</sup> and an additional benefit of this approach may be the avoidance of visual field loss whilst attempting to control glaucoma medically. However, in most cases surgery is considered only where maximal medical treatment

has failed to halt disease progression. Over the last decade there have been significant developments in the medical treatment of glaucoma and it has been suggested that patient management strategies are likely to change with medical therapy being increasingly preferred in lieu of surgical intervention. Amongst patients who have received long term medical treatment prior to surgery, the success rates of trabeculectomies tend to be lower, ranging from 45-93%.<sup>2</sup> Developments in the diagnosis and monitoring of glaucoma may also affect the relative use of medical and surgical management. In Yemen, we recently observed that trabeculectomy cases performed are very low compared to the number of glaucoma patients among the population<sup>4</sup> and that trabeculectomy rates have fallen. We therefore conducted this study to determine whether our observation was an issue or not. The total number of cataract and glaucoma operations performed in the Eye Department in Al-Thawra Hospital, Sana'a, Yemen for each year from 1995-2000 were obtained from the Department of Statistics, Sana'a, Yemen. Cataract operations were divided into those with and without intraocular lens implantation. Glaucoma surgery cases were also analyzed for each year.

**Table 1** shows the number of cataract and glaucoma filtration surgery (trabeculectomy) performed from 1995-2000 and the comparison between number of glaucoma surgeries performed in the United Kingdom<sup>5</sup> and Yemen for the whole population. Cataract surgery techniques are improving in Yemen and the visual outcomes and rehabilitation are also getting better. The number of cataract cases having intraocular lens implantation

Table 1 - Number of cataract and glaucoma filtration surgery (trabeculectomy) performed over 6 years and comparison between number of glaucoma surgeries performed in the United Kingdom<sup>5</sup> and Yemen for the whole population.

Year	Total cataract surgery	Cataract surgery with IOL	Cataract surgery without IOL	N of glaucoma surgery	Glaucoma surgery in Yemen *	Glaucoma surgery in United Kingdom **
1995	<b>509</b>	473	36	63	945	18,112
1996	<b>346</b>	312	34	42	630	18,928
1997	<b>364</b>	334	30	33	225	17,595
1998	<b>386</b>	314	72	29	435	14,507
1999	<b>469</b>	393	76	16	165	11,882
2000	<b>380</b>	266	114	22	195	9,181
*Yemen population 19 million and figures are predicted, **United Kingdom population 60 million, IOL - intraocular lens						

is rising steadily. This can be explained by the improvement in the training of eye doctors as well as the reasonable prices of the intraocular lens Yemeni patients are getting. Moreover, the introduction of the memorandum issued by the Ministry of Health for the routine use of intraocular lenses in cataract surgery help in putting this technique as the standard for every cataract surgery. Unfortunately, the number of glaucoma filtration surgery (trabeculectomy) is very small and is falling over the years compared to the predicted affected patients with glaucoma. There are number of explanations for this low surgical intervention: 1. Most glaucoma patients in our community were presented late with advanced pale cupped discs and at this stage there are few that can be offered. 2. Many eye surgeons throughout Yemen avoid doing glaucoma filtration surgery (trabeculectomy) for lack of training. 3. The fear of complications of trabeculectomy especially in advanced cases, made experienced eye doctors to avoid surgical intervention. 4. The introduction of new generations of anti-glaucoma therapy with better hypotensive effect.

We need to tackle these problems by educating our patients and introducing screening programs within the Yemeni community; hence those glaucoma patients can be presented earlier and get treated safely. We also need to train more doctors to perform trabeculectomy filtration surgery and to know how to manage the complications of this procedure. This will decrease the number of blind people due to a reasonably treatable disease.

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Is methotrexate safe in the treatment of psoriatic patients?

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Psoriasis is a common genetically determined, chronic, relapsing and remitting, inflammatory skin disease, with great physical and social impact.<sup>1</sup> Accelerated epidermal cell replication, with abnormal pattern of keratinocyte differentiation and the presence of dermal and epidermal inflammatory cell infiltration have been considered to be the main pathological events in psoriasis.<sup>1,2</sup> Topical applications of tar, steroids or calcipotriol are therapies of choice for patients with mild to moderate severity of psoriasis.<sup>3</sup> However, in patients with severe psoriasis, systemic therapy is an established alternative, such as photochemotherapy (PUVA), retinoids, cyclosporine and methotrexate (MTX).<sup>1,3</sup> Methotrexate is considered as a cytotoxic agent. It is an antimetabolite that mediate its antimitotic effects through inhibition of DNA synthesis by blocking dihydrofolate reductase and thymidylate synthetase enzymes.<sup>4,5</sup> It also has anti-inflammatory effects through inhibition of leukocyte chemotaxis. These 2 principle actions explain its clinical effect in controlling psoriasis.<sup>4,5</sup> Methotrexate is an effective treatment for severe psoriasis. It is particularly useful in controlling erythrodermic and generalized pustular psoriasis (GPP) form, where it may be a life saving drug.<sup>1,5</sup> The most serious toxic effect of the drug is hepatotoxicity.<sup>5</sup> The tendency to a liver damage may be related to multiple risk factors, such as advanced age, diabetes, alcohol intake, obesity and impaired renal function.<sup>5</sup> Reported signs of MTX toxicity also include, bone marrow suppression with leukopenia and thrombocytopenia, gastro intestinal ulceration, pneumonitis, oligospermia and nephrotoxicity.<sup>5</sup> Due to these reported toxic effects, many dermatologists limit its uses, although it is available and inexpensive as compared to other systemic drugs for psoriasis. Therefore, the present study was arranged to investigate further, the effects of long term, low dose MTX therapy, in the management of severe psoriasis in Iraqi patients.

One hundred and thirty-two patients with severe psoriasis consisting of 22 patients with erythrodermic form, 29 patients with GPP and 81 patients with widespread plaque psoriasis were selected from the Department of Dermatology and Venereology, Baghdad Teaching Hospital, Baghdad, Iraq to receive MTX therapy during the period October 1998 to September 2000. They were 79 females and 53 males with female to male ratio of 1:49.<sup>1</sup> Their ages ranged from 18-66 years (mean 42.3 ± SD 10.2 years). All patients were informed