## Correspondence

## Late presentation of retinal detachment in India: A comparison between developing nations

According to WHO, one-fifth of blind people in the world are Indians and their number is going to double soon. Cataract-related blindness has been the focus but retinal blindness is still unaddressed. Retinal detachment (RD) is the most common indication for retinal surgery. Traditionally, it has been labelled 'incurable' and community-based efforts for its management have been inadequate. Reflecting on the diverse nature of the Indian population, we studied patterns and attributes of RD in northern India. Three hundred and seventy-eight patients undergoing surgery for RD during 2012 at our centre were analysed retrospectively (Table I).

Macular detachment was commoner in our study, as was the incidence of RD in both eyes. Around 20% of patients presented within 7 days in a study from southern India,<sup>3</sup> less than 3% reached us in the same time frame. At least 80% of our patients belonged to lesser developed parts of India. Pseudophakic patients with RD are increasing in number (Table I), probably because of the higher number of cataract surgeries being performed, that too at a younger age. Stronger medullary and cortical vitreous in the young is likely to exert stronger traction over the retina, resulting in retinal breaks. This trend is similar to that in western countries.6

A review of 14 studies of RD from the developed world suggests the highest prevalence of RD in the seventh decade. They describe a variable percentage for traumatic RD (up to 16.4%) and bilateral RD (3%-33%), with a higher incidence of lattice degeneration in East Asians (60%). Macula-off RD have been reported to be around 40%–60% in western countries as opposed to high rates (up to 98%) in the Indian subcontinent (Table I).

Our results highlight the delay associated with management of RD in India. It reflects the deficient state of local services and referral systems, requiring an urgent re-evaluation of our regional services. As the rate of cataract surgery increases, prevalence of RD would increase. Improper diagnosis and late referral will add to the burden of preventable blindness.

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Table I. Comparison with available data on retinal detachment (RD) from developing countries

Author(s), country, year published	Peters <sup>1</sup> (South Africa, 1995)	Yorston et al. <sup>2</sup> (Kenya, 2002)	Jalali <i>et al</i> . <sup>3</sup> (Southern India, 2005)	Malla <i>et al.</i> <sup>4</sup> (Nepal, 2009)	Jamil <i>et al.</i> <sup>5</sup> (Pakistan, 2012)	Our study (Northern India, 2015)
Number of patients	112	361	433	110	107	378
Presentation after 1 month (%)	69.6	56.2	46.6	_	85*	48
Mean age (years)	40	47	38.4	30-70†	33.1	40.1
Retinal breaks (%)						
Horse shoe tear	28	78.6	47.1	51	42.1	42
Hole	28.9	1.4	29.4	32.6	15	18
Retinal dialysis	8.8	2.8	5.3	3.6	3.7	5
Giant tear	1.8	8.3	4	_	_	3
Macular break	_	10.8	4	1.5	_	4
Cataract surgery (%)	10	24.1	35.1	~30‡	~30‡	42
Macula-off RD (%)	_	91.9	86.8	98.2	93.5	97.5
PVR >Grade C (%)	33.3§	17.5	31.9	16.3	_	33
Bilateral RD (%)	_	12.4¶	4.5	_	2.8	13.5
Hypotony (%)	_	_ "	9.7	_	_	19
Myopia (%)	10.5**	_	31.1††	34.5‡‡	57.7§§	18.5
Trauma (%)	29.8¶¶	7.8***	16.2†††	9	24.8	21.9
Lattice	_	_	26.8	5.4	18.1	19.1

PVR proliferative vitreo-retinopathy through vision loss in fellow eye

\* from 2 weeks onwards

† not specified

‡ includes pseudophakic/aphakic

§ older classification

¶ data calculated §§ automated

\*\* defined as refractive error >-6D refractometer reading >-1D of fellow eye ¶¶ on history

†† diagnosed by examination of refractive status \*\*\* history of trauma but not completely defined as traumatic RD

‡‡ criteria not defined ††† excludes penetrating trauma