



PRECISION OF PRESBYOPIC GLASS PRESCRIPTION AND USAGE AMONG PATIENTS ATTENDING OPHTHALMOLOGY DEPARTMENT AT TERTIARY CARE CENTER

Dr Usha B R	Associate Professor SridevarajUrsMedical College Kolar.
Dr Reshma R*	Assistant Professor SridevarajUrsMedical College Kolar. *Corresponding Author
Dr Pannah Shetty	Resident SridevarajUrsMedical College Kolar.
Shakeela B	Optometrist SridevarajUrsMedical College Kolar.
Dr Manjula T R	HOD Professor SridevarajUrsMedical College Kolar.

KEYWORDS : Presbyopia, spectacles, Age

INTRODUCTION:

Presbyopia is physiological condition of the eye where there is an insufficiency of accommodation. It occurs after the age of 40 years but it can commence at early age. It may be due to uncorrected hypermetropia, premature onset of cataract and glaucoma. This is one of the most common prevailing condition in which patient presents with blurring of vision more so for near than distant vision. There are various theories regarding presbyopia among them, the theory of Helmholtz proposes that accommodation occurs as a result of the elastic properties of the lens and the vitreous, which allow the lens to become more round when zonular muscle tension is relieved during ciliary muscle contraction which increases the anterior convexity of the lens. The nonsurgical management is spectacle and contact lens, out of which spectacles are more accepted than contact lens. The other treatment modalities include accommodative intraocular lens, scleral expansion segments, monovision and multifocal intraocular lens.

Objective:

To know the precision of presbyopic glass prescription and usage among patients attending ophthalmology OPD at tertiary care centre.

METHOD:

All consecutive patients more than 40 years attending ophthalmology Out Patient Department complains of blurring of vision for near are subjected to visual acuity assessment. Refraction, slit lamp examination, intraocular pressure assessment by Goldmann applanation tonometer. Distance visual acuity is assessed by Snellen's visual acuity chart. Near visual acuity is assessed by Jaeger's chart. Presbyopic glasses are prescribed depending upon the age of the patient after correcting distance vision. At 40 years of age +1D of convex lens was prescribed. 41 years to 44 years of age +1.25D was prescribed. At 45 years +1.5D was prescribed. 46 years to 49 years of age +1.75D were prescribed. +2D of convex lens was prescribed to 50 years of age. At 51 years to 54 years +2.25D, +2.5 D to 55 years of age. +2.75D was prescribed to 56 years to 59 years of age and +3.0D to 60 years and above. Majority of the patients had normal intraocular pressure ranging from 12mmhg to 20 mmhg. Slitlamp examination showed early cataract in majority of cases with their age ranging from 56 years to 60 years.

RESULTS:

Total patients screened were 300 who were above 40 years of age during 3 months duration. More patients belong to the age group more than 60 years of age as shown in table 1. Males outnumbered females in all the age group except 46 years to 50 years where female patients were more. Males accepted the correction and used more presbyopic glasses than females as shown in Table 2. 125 patients out of 300 were using the glasses.

DISCUSSION:

Total symptomatic patients screened were 300 who were above 40 years of age during 3 months. More patients belong to the age group more than 60 years of age. Males outnumbered females in all the age group except 46 years to 50 years range where female patients were more. All patients were given glass prescription for near as per the age after correcting for distance vision. Males accepted the correction and

used more presbyopic glasses compared to females which were noted in the subsequent follow up. 125 patients out of 300 were using the glasses. Less than 50% i.e. 41.6% of patients were keen on using spectacles others took the prescription of spectacles and not keen on using the glasses. Majority females belong to rural area not keen on using glasses due to their work pattern at fields and they are uncomfortable on wearing spectacles due to rural background. Others mentioned about monetary constraints.

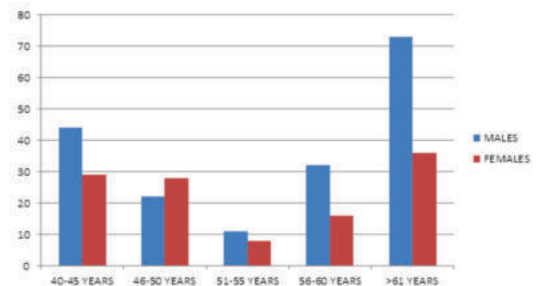
CONCLUSION:

All patients were given spectacles as per their age following distance correction but the usage of spectacles were 41.6%.

Total Number Of Patients Screened For Correction

Table 1

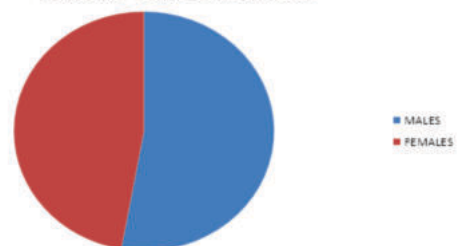
AGE	MALES	FEMALES	TOTAL
40-45 YEARS	44	29	73
46-50 YEARS	22	28	50
51-55 YEARS	11	8	20
56-60 YEARS	32	16	48
>61 YEARS	73	36	109



Usage Of Presbyopic Correction

USING SPECTACLES	MALES	FEMALES
	66	59

PATIENTS USING SPECTACLES



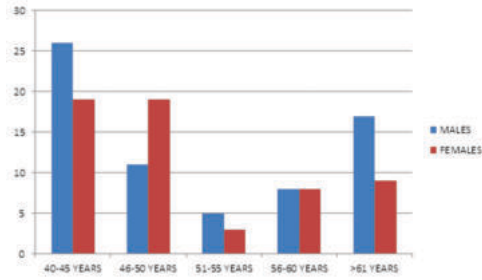
Distribution Of Patients Using Spectacles

Table 2

AGE	MALES	FEMALES	TOTAL
40-45 YEARS	26	19	45

46-50 YEARS	11	19	30
51-55 YEARS	5	3	8
56-60 YEARS	8	8	16
>61 YEARS	17	9	26

PATIENTS USING SPECTACLES



REFERENCES:

1. Correction of presbyopia: An integrated update for the practical surgeon Marie Joan Therese D. Balgos, 1 Veronica Vargas, 1 and Jorge L. Alió 1, 2
2. Correction of presbyopia: An integrated update for the practical surgeon Marie Joan Therese D Balgos 1, Veronica Vargas 1, Jorge L Alió 1 2
3. Presbyopia: Effectiveness of correction strategies James S Wolffsohn 1, Leon N Davies 2