

Original Article

SQUINT PUBLICATION IN OPHTHALMIC JOURNALS FROM PAKISTAN: A 10 YEAR REVIEW OF LITERATURE

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Objective: To analyze the publication rate of squint, the most frequent study design used, nature of published articles and yearly breakdown of articles in two ophthalmic journals of Pakistan from 2006-2015.

Methods: All editorial, original articles, review articles, case reports published and available on the website of Pakistan Journal of Ophthalmology, Al-Shifa journal of Ophthalmology from 2006 to 2015 was analyzed to determine the publication rate of squint and study design used in different articles.

Results: Overwhelmingly four hundred and twenty seven (427) original articles published. Eighty six (86) case reports, fifty five (55) editorials, and no review article published on squint. Nine original articles (n= 9) 2.1%, one case report (n=1)1.2%, one editorial (n=1) 1.8% published on squint. In five different studies prospective study design was used, cross sectional, retrospective, case and control used in three different studies.

Conclusions: These findings revealed that publications on squint are less prevalent. Most frequent study design used in published articles on squint was prospective and the nature of articles mostly described the surgical aspects of squint.

Keywords: Squint, editorial, case report, original articles, Pakistan Journal of Ophthalmology (PJO). Al-Shifa journal of Ophthalmology (ASJO)

Introduction

Squint (strabismus) is commonly defined as misalignment of the visual axis. It may occur in horizontal and vertical forms or some time occurred in combined form (horizontal and vertical). It is more frequently affected one eye and visual loss may results in amblyopia (lazy eye). Earlier the treatment begun, shorten will be the duration. So that vision can be saved in earlier ages of life. Bile ZK et al studied that squint is second common disorder (545/3289, 17%) in children.¹ A study conducted at Bahawal victoria hospital showed that the rate of squint is 12.4% (124/1000)². Khan A et al (1996) observed that out of 130 million, 7.02 million has squint (5.4%).³ Squint prevalence is 2% in south India.⁴ Shafique et al (2007) reported 59.9% amblyopia and density 23.6%.⁵ Khalid et al (2012) reported the incidence of strabismic amblyopia is 26% and density 74%.⁶ The squint rate is 17%, 12.4%, 5.4%, 2%¹⁻⁴, incidence is 59.9%,⁵ density was 23.6%, 74%^{5,6} but there is paucity of scientific publications on squint. To our best knowledge, no study in Pakistan discussed the publication rate of squint ophthalmic journals. This study was conducted to find the publication rate of squint in two local ophthalmic journals to highlight the publication deficit of squint and to find the most frequent study design used nature of

published articles in Pakistan journal of Ophthalmology (PJO) and Al Shifa journal of Ophthalmology (ASJO) are recognized by Pakistan medical and dental council⁷ and Higher Education commission, were selected as the data easily accessible from their respective websites as per inclusion criteria from 2006 to 2015. PJO is an official quarterly journal of Ophthalmological society of Pakistan (OSP) and has X category.⁸ ASJO is an official biannual journal of Al-Shifa trust eye hospital Rawalpindi has z category.⁹

Methods

Electronic research strategy was designed to retrieved the data from websites of Pakistan journal of Ophthalmology and Al-Shifa journal of O p h t h a l m o l o g y w w w . p j o . c o m . p k , w w w . a l s h i f a j o u r n a l . o r g respectively from 2006 to 2015. All editorial, original article, review article and case report were investigated to analyze the publication rate of squint. The case report and original articles related to squint were studied to elaborate the most frequent study design used in published articles. The nature of articles examined to see the publication trend of authors to find or investigate the medical or surgical aspects of squint. Yearly breakdown of articles published in both journals was noticed to find the interval in published

Table-1: Distribution of Editorials, Articles and Case report in PJO.

Year	Editorials	Original Articles	Case Reports	Review Articles
2006	02	20	06	02
2007	04	34	08	-
2008	04	33	07	-
2009	03	35	04	01
2010	04	32	05	01
2011	04	37	04	01
2012	04	38	08	-
2013	04	36	09	01
2014	04	39	08	-
2015	04	34	10	-

Table-1: Distribution of Editorials, Articles and Case report in ASJO.

Year	Editorials	Original Articles	Case Reports
2006	01	06	04
2007	02	07	02
2008	02	07	003
2009	02	10	-
2010	02	09	01
2011	02	10	02
2012	02	10	02
2013	02	12	-
2014	02	12	02
2015	01	06	01

Table-3: Published Data on Squint in PJO and ASJO.

Published date	PJO	ASJO	Total	Squint Date Percentage
Editorials	37	18	55	1/55=1.8%
Original articles	338	89	427	9/427=2.1
Case Reports	69	17	86	1/86=1.2%

Table-4: Yearly breakdown of articles and case reports in PJO.

Year	Volume	Issue	Topic
2007	23	1	Incidence of amblyopia in strabismus population
2007	23	3	Recovery of post traumatic Brown syndrome (case report)
2008	24	1	Modified limbal incision, an easy and safe window for extra ocular muscle surgery
2009	25	3	Risk factors of strabismus in southwestern Nigeria
2012	28	3	Graded recession for primary inferior oblique overaction
2013	29	4	Adjustable suture in constant exotropia

Table-5: Yearly breakdown of articles and case reports in ASJO.

Year	Volume	Issue	Topic
2009	5	2	Adjustable suture strabismus surgery: Procedure of choice(editorial)
2009	5	2	The out comes of horizontal surgery
2013	5	2	Visual outcome in strabismic and anisometropic amblyopia after patching therapy
2013	09	1	Frequency of esotropia and exotropia among patients between 3 to 25 years of age
2015	11	1	Exotropia and relationship of orthoptic assessment of exotropia with its surgical outcome

Discussion

Four ophthalmic journals published in Pakistan; they are the Pakistan journal of Ophthalmology, Al Shifa journal of Ophthalmology, Ophthalmology update and Ophthalmology Pakistan. The PJO and ASJO was chosen for this study as their data met the inclusion criteria from 2006 to 2015 (10 years) available, easily accessible and can be retrieved from their websites. PJO has an open access to all editorials, abstracts and full length articles. Thirty nine (39) issues published in PJO, three issues in 2006 and four issues published every year till December 2015. Al-Shifa journal of Ophthalmology has an open access to all abstracts; full length article does not updated. Editorials had no access to be opened. Total fifty five (55) editorials published (thirty seven (37) in PJO and eighteen (18) in ASJO). Four hundred and twenty seven (427) original articles published three hundred and thirty eight (338) in PJO and eighty nine (89) in ASJO, eighty six (86) case reports (sixty nine (69) in PJO and seventeen (17) in ASJO), six (6) review articles in PJO but no review article published on squint. One editorial published in ASJO but it had no access to be electronically retrieved.¹⁰ One case report reported the acquired Brown syndrome in seven (7) year old male after trauma by donkey's hoof and complete recovery seen after three months.¹¹

Nine original articles published on squint, five (5) published in PJO and four (4) in ASJO. Five articles described the surgical aspects of squint. Shafique MM et al described that modified limbal incision, an easy and safe window for extra ocular muscle surgery as compared to the muscle over approach.¹² Asim AA et al reported that Flink's method is an effective procedure for primary inferior oblique overaction.¹³ Shakir M et al elaborated that adjustable suture is an easy, tolerable and effective in patients has constant exotropia.¹⁴ Sikder MA et al described that 62.9% successful Outcome of horizontal strabismus surgery.¹⁵ Mahreen et al concluded that good surgical results will be

obtained if surgery done in accordance with orthoptic assessment.¹⁶

A case and control study done in southwestern Nigeria showed that the hypermetropia was a significant risk factor of strabismus.¹⁷ A hospital based study showed the incidence of amblyopia was 59.9% in strabismus population. Patching therapy was done on 50 subjects between 3 to 8 years in strabismic and anisometropic amblyopia and visual outcome was seventy eight percent (78%)¹⁸. A cross sectional study showed that the frequency of esotropia and exotropia was 63% and 27 % respectively in 3 to 25 years.¹⁹

Yearly breakdown of articles in ASJO that in 2009 one editorial and two original articles published in a single issue^{10,15,18}. With four years interval in 2009 third article¹⁹ published. In 2015 fourth article published after a gap of two years¹⁶. Yearly breakdown of articles in PJO was that the one original article⁵ and one case report published in 2007.¹¹ With one year interval, second¹² articles published in 2008, third¹⁷ article in 2009. With three years interval fourth article¹³ published in 2012 and fifth article published in 2013 after one year¹⁴. In 2014 and 2015, eight issues were published but no article published on squint. Shafique MM was the leading principal author of two articles and co-author of one case report.^{5,11,12}

In five different studies prospective study design.^{5,12,15,16,18} was used, cross sectional¹⁹, retrospective.¹⁴ case and control¹⁷ design used in three different studies. No study design was mentioned¹³ in one article. The most frequent study design used was prospective. Randomized clinical trial was not used in the literature published in PJO and ASJO.

The rate of squint published in Pakistan Journal of Ophthalmology was 1.5% (5/338) and Al-Shifa Journal of Ophthalmology was 4.5% (4/89). The resultant publication rate in two ophthalmic journals on squint is 2.1%. Kumar A et al in 2011, selected seven (07) top ophthalmic journals from 2005 to 2009 and analyzed that the sub specialty of squint is 2.3% (282/12426)²⁰. This study was intended to inform the clinician about paucity of squint publications in

recognized journal of American academy of ophthalmology.

Conclusion

The publication rate of squint is 2.1%. There is need to increase publications on this topic. The authors must be encouraged to publish more articles that may help to find new horizons for

clinicians to understand better diagnostic and therapeutic approach to manage the squint and prevent the child from strabismic amblyopia.

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