

# Academic Sports Scholars



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# ASSESSMENT OF OPHTHALMIC PROBLEMS IN JUNIOR MALE HOCKEY PLAYERS

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# A<u>BSTRA</u>CT

he present study was conducted to assess ophthalmic problems in junior male hockey players. 100 state level junior male hockey players (Ave. age 16.23 yrs) were selected as sample. The criteria for selection of subjects were participation in state level hockey competitions in the state of Chhattisgarh. Random sampling method was preferred choice in the present investigation. Ophthalmic examination of selected subjects was conducted at Department of Ophthalmology, All India Institute of Medical Science, Raipur. The results showed that 09% junior male hockey players were diagnosed with ophthalmic problems while 91% junior male hockey players had normal ophthalmic findings. It was concluded that prevalence of ophthalmic problems in junior hockey players is 9% which is quite high in the context of nature of sport such as hockey.

KEYWORDS: Ocular muscle imbalance, skill ability, hockey.

#### **INTRODUCTION:**

Under the domain knowledge of sports science, psycho-motor is factor which influences the performance to a great extent. Good psycho motor abilities are mainly dependent upon our ocular vision. Vision is an essential part of most human activities including sports and games because it is the process of reacting to what we see (Martin, 1993). On average, the competitive athlete's vision is no better than the rest of the population. Vision is essential in maintaining a proper body balance. A properly functioning balance system allows humans to see clearly while moving, identify orientation with respect to gravity, determine direction and speed of movement, and make automatic postural adjustments to maintain posture and stability in various conditions and activities. In this relation role of ocular system becomes significant. An ocular muscle balance is made up of vergence facility, visual acuity, dynamic fixation, and coordination between the eyes. When ocular muscle imbalance occurs, it affects our visual system. A person has ocular muscle imbalance may have deficient visual acuity,



divergent muscle imbalance, convergence insufficiency, ocular alignment and eye dominance.

Since hockey is India's national game, so many studies [Dureha and (2010), Manna et al. (2011), Sharma et al. (2012), Parthiban, I.J. (2012), Tripathi et al. (2013)] have been conducted to assess the impact of various factors on hockey performance. Surprisingly assessment of ophthalmic problems in junior male hockey players has not been performed by any of the researcher, hence the present study was planned.

#### **HYPOTHESIS**

It was hypothesized that majority of junior male hockey players will have normal ophthalmic findings.

# METHODOLOGY :-

# The following methodological steps were taken to conduct the study:

Sample :

This study has been conducted on 100 state level junior male hockey players (Ave. age 16.23 yrs). The criteria for selection of subjects were participation in state level hockey competitions in the state of Chhattisgarh. Random sampling method was preferred choice in the present investigation.

# Tools:

# Ocular Muscle Balance :

Ophthalmic problems in selected subjects was determined through visual acuity, cover-uncover and visual fatigue test respectively.

# Procedure:

-100 junior male hockey players who took part in state level championship held at Chhattisgarh were selected randomly.

-The ocular examination of the selected subjects was conducted in All India Institute of Medical Sciences (AIIMS) Raipur. The interpretation of ocular findings was done as per the medical card issued by the concerned ophthalmologist.

-Ocular findings was tabulated in case of each subject.

-The results related with ocular findings are presented in table 1.

# RESULT

Table - 1
Assessment of Ophthalmic Problems in a Group of
Junior Male Hockey Players (N=100)

	Ophthalmic Problems	
	Not Seen	Seen
	N (%)	N(%)
Junior Male Hockey Players	91 (91%)	09 (09%)

The results shown in table 1 indicate that 09% junior male hockey players had some or other kind of ophthalmic problems which were treatable and not very serious while 91% junior male hockey players had normal ocular findings. The results are not surprising because visual defects are also observed in elite athletes. Loran and MacEwen (1995) opined that 85-90% of sensory information related with environment is obtained visually by athletes, so slight ocular defects can reduce skill ability of hockey players. In this context ocular examination for hockey players is very important.

# CONCLUSION

It was concluded that prevalence of ophthalmic problems in junior hockey players was 9%. It was concluded that prevalence of ophthalmic problems in junior hockey players is 9% which is quite high in the

context of nature of sport such as hockey. REFERENCES :

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