Original Article *Pothaki* (trachoma) - A survey study of prevalence and severity

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Abstract:

Pothaki is a disease manifested at eye lid due to vitiation of *Kapha Dosha*. It characterized by formation of *Rakta Sarshapa* or *Shweta Sarshapa Sanniba Pidakas* at the lid. Its clinical features closely resembles Trachoma which caused by Chlamydia trachomatis. The present survey was done to know the prevalence and severity of disease in the patient attending to the Hospital. The observations reveals that maximum number of patients i.e 55.24% were recorded in the month of March, lacrimation was found in 69.72% of individuals and conjunctival scarring was found in 93.57% of individuals. The present study reveals the prevalence of trachoma in this particular area. Incidence of 55.24 % of patients effected *Pothaki* was recorded in the month of March which was highest. 82.56% patients were having congestion of tarsal conjunctiva with predominant features like foreign body sensation, lacrimation, and mucoid discharge.

Keywords Pothaki, Trachoma, Prevalence

Introduction:

Pothaki is a disease manifested at eye lid due to vitiation of Kapha Dosha. It is characterized by formation of Rakta Sarshapa [1] or Shweta Sarshapa [2] Sanniba Pidakas at the lid associated with discharge, pain, heaviness, itching etc. The clinical features of Pothaki closely resemble Trachoma. Trachoma is a chronic kerato-conjunctivitis, primarily affecting the superficial epithelium of conjunctiva and cornea simultaneously [3]. It is caused by Chlamydia trachomatis, but other pathogenic microorganisms or secondary infections may increase the severity of the disease. Trachoma inflammation may undergo spontaneous resolution or may progress into conjunctival scarring which can cause trichiasis or entropion leading to abrasion on the cornea by eyelashes frequently resulting into corneal ulceration, followed by scarring and loss of vision [4]. Trachoma is the leading cause of infectious blindness worldwide and is caused by ocular infection with the intracellular bacterium Chlamydia trachomatis. [5] Episodes of infection usually begin in childhood, while blindness from corneal scarring occurs after repeated infection, scarring of the eyelids and distortion of the eyelashes, associated trauma and secondary bacterial infection. [6] Though exact data is not available but it is a fact that after the advent of Sulphonamides and quinolone group of antibacterial drugs the incidence, severity of trachoma has come down but the disease still Persists. Trachoma is responsible for the 15 20% of the world blindness; 500 million individuals are affected around the World and 150 million individuals with

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active trachoma. [7]

Survey is carried out for epidemiological studies by trained teams to find the incidence or prevalence of health or disease conditions in a community. It is also carried out in operational research, such as assessment of existing conditions and their place to follow a programmed or to study the merits of different methods adopted to control a disease. Thus, it provides useful information on

1. Changing trend in health status, morbidity, mortality, nutritional status or environmental hazards, health practices, etc

2. Provide feedback which may be expected to modify policy and system itself and lead to redefinition of objectives

3. Provide timely warning of public health hazards. [8] By considering these points it is planned to study the prevalence and severity of *Pothaki* (trachoma) in patients attending the OPD of *Shalakya* department Material and methods:

Material and methods:

A survey planned to be conducted on the disease *Pothaki* (Trachoma) amongst the patients attending the OPD of *Shalakya* department. For which a special survey Performa was prepared and an attempt was made to screen all patients. The study had started from January 2006 and continued till June 2006, the data collected during this period was analyzed and detailed as follows-

Observations:

In the table-1 series maximum number of patients i.e.55.24 % were recorded in the month of March, 40.42% % of patients were in April, 40.09% % patients were in February, 27.27% patients were in January, 25.51% patients were in June and 21.35% patients were found in the month of May.

Table-1 Month wise distribution of patients effected with trachoma attending the OPD						
Month	No. of patients In OPD	Screened Patients for suspected cases	Trachoma Diagnosed patients	%		
January	368	187	51	27.27		
February	504	202	81	40.09		
March	622	248	137	55.24		
April	471	188	76	40.42		
May	480	192	41	21.35		
June	491	196	50	25.51		

Character	No.	%
Age - 36-45 yrs	100	22.93
Sex - Female	255	58.48
Religion - Hindu	377	86.46
Education - Primary	138	31.65
Marital status - Married	348	79.81
Occupation - H. wives	138	31.65
Socio-economic - Middle	120	27.52
Chronicity 0-3 months	139	31.88
Place of residency - Urban	368	84.40

In the (table-2) present study 58.48% were females, 86.46% belonged to Hindu religion, 31.65% had primary education, 79.81% were married, 31.61% were house wife, 27.52% were belongs to middle socio economic status, 31.88% had 0-3 months history of chronicity and 84.40% were residing at urban areas.

In the (table-3) series 64.22% patients had foreign body sensation which was followed by 69.72% patients complaining of Lacrimation, 22.47% patients had sticky lids, 65.13% patients had Mucoid Table-03 Presenting symptoms wise distribution of survey patients:

of survey patients.		
Presenting symptoms	No.	%
Foreign body sensation	280	64.22
Lacrimation	304	69.72
Sticky lid	98	22.47
Mucoid discharge	284	65.13
Blurring of vision	120	27.52
Burning sensation	194	44.49
Itching	200	45.47
Head ache	204	46.78

discharge, 27.52% patients had blurring of vision, 44.49% patients had burning sensation, 45.47% patients had itching and 46.78% patients were having headache.

The study (table 4) reveals that 82.56% patients were having congestion of tarsal conjunctiva which was followed by 36.23% of patients having congestion of fornix, 70.64% of patients having conjunctival follicles, 43.57% of patients having papillae and 93.57% of patients having scaring at

Table-04Presentingsurvey patients:	signs wise	distribution of
Presenting signs	No.	%
Cong. of tarsal conj.	360	82.56
Cong. of fornix	158	36.23
Conjunctival follicles	308	70.64
Papillae	198	43.57
Conjunctival scarring	408	93.57

conjunctiva.

Discussion:

Problem of blindness in India is not only of its gigantic size, but also of its causes, which are largely preventable or curable with the present available knowledge and skill. Infections of eye are common problem among all groups of population especially in low hygienic condition [9]. The improper management of condition may lead to repeated attack of infection and thus disease becomes chronic. The one amongst such a diseases is trachoma. Trachoma and associated infections are still the most important causes of preventable blindness in the world [10]. Jamnagar, is known for its natural dry and dusty weather, added to this with the pollution due to heavy industrialization has prone the individuals of this area to different types of eye diseases. If the disease is further neglected may lead to various complications.

In the present survey study the maximum number of individuals having clinical features of Pothaki (trachoma) was in the month of March (table 1) it may probably dude increased dryness and dust in the environment. The religion and education revels the maximum number i.e.86.46% were Hindu and have primary education. The primary education may not be sufficient to understand about spread of contagious diseases and religion revels the trend of patients attending to the OPD. In the present study maximum number of patients i.e. 31.88% were house wife it may be due routine house hold work of cleaning and thus may exposed to dust at home more as compared to other individuals. The chronicity of individual in the present survey was 0-3 months which indirectly shows that patient have attended the nearby hospital in the earlier to get relived from the complaint. When the clinical feature is considered the maximum number of individual i.e. 69.72% were having lacrimation it may be probably due to effect of dust and conjunctival scaring which was also more on examination of conjunctive.

Conclusion:

The disease *Pothaki* (Trachoma) is prevalent in the areas of Jamnagar. In the present survey study the maximum number of individuals were diagnosed as suffering from *Pothaki* (Trachoma) in the month of March. The patients in survey have shown the lacrimation and conjunctival scarring as predominant clinical feature. The further survey study in large population may be required to know the causes of prevalence and magnitude of disease in this area which ultimately helps to plan the management of disease accordingly. These measures can help to introduce preventive strategies by government and other organizations.

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