DEMOGRAPHIC STATISTICS IN PATIENTS OF VRANASHOPHA (CELLULITIS)

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INTRODUCTION
Acharya Sushruta, father of Indian surgery (Shalya Tantra) was well aware of importance of Vranashopha (inflammatory swelling) and Vrana (wound) and their management in surgical practice. The Vranashopha was described as earlier phase of Vrana.1 Vranashopha has 3 progressive stages, these are Amawastha (early stage of inflammatory process), Pachyamanawastha (true inflammatory stage), and Pakwawastha (suppurative stage) respectively.2

Clinical features of Vranashopha explained by Acharya Sushruta resemble to inflammatory swelling like cellulitis. Cellulitis is characterised by an acute, diffuse, spreading, oedematous non suppurative inflammation of the dermis and subcutaneous tissues.3 Cellulitis can cause mild discomfort to severe complications like sepsis, local gangrene, necrotising fasciitis, septicaemia which can lead to death.4 Condition of necrotising fasciitis is very dangerous which has 39% of mortality rate.5 A study on 20 patients of cellulitis was carried on the basis of clinical history.

MATERIAL AND METHODS
After detailed clinical history and informed consent 24 patients with sign and symptom of cellulitis were registered as per designed proforma from the OPD/IPD of the Department of Shalya Tantra, Sir Sunderlal Hospital I.M.S., B.H.U., Varanasi (U.P.) Random selection was made in respect of age, sex, occupation, prakriti, economic status, addiction, duration of disease, onset of disease, etc. out of these 20 patients could complete the study and 4 patients discontinued the treatment so they were not included in the study. Routine and needful investigation such as CBC, Blood sugar, RFT, LFT, HIV, HBsAg, had been done.
Inclusion Criteria: Cellulitis of all parts of body except orbital cellulitis, with signs and symptoms as pain, tenderness, edema, erythema, local temperature and fever were included.

Exclusion criteria: Patients of Diabetes mellitus, Hypertension, Chronic Renal Failure, Malignancy, Orbital cellulitis, HBsAg positive, HIV positive were excluded from the study.

Assessment Criteria for cellulitis

Local: Local criteria as colour (erythema), edema, temperature, induration, tenderness were assessed by different grading system in the patient with cellulitis.

Generalised: Generalised criteria as general condition, pulse rate, blood pressure, respiration rate, pain, fever were assessed.

Local and generalised criteria were assessed daily and investigation criteria were assessed weekly and grading of the criteria was done according to designed proforma.

<table>
<thead>
<tr>
<th>TABLE 1: ASSESSMENT OF CELLULITIS</th>
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<td>Assessment criteria</td>
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<td>Pain</td>
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<td>Tenderness</td>
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<td>Edema</td>
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<td>Erythema</td>
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<td>Fever</td>
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RESULT

Demographic study was carried out according to following subject:

1. Age

Out of 20 maximum 35% (n=7) patients were of age group between 41-50 years.

2. Sex

Majority of patients (70%) were male, and rest 30% patients were female.

3. Occupation

Occupational status showed maximum 35% of patients were farmer.

Fig: 1 Distribution according to incidence in Age

Fig: 2 Distribution according to Sex

Fig: 3 Distribution according to incidence in Occupation
4. Inhabitancy
In present study 12 (60%) patients were from rural area and 8 patients (40%) were from urban area.

5. Diet
60% of patients were having mixed (Veg- nonveg) diet, while 40% were vegetarian.

6. Addiction
Out of 20 patients 10 patients (50%) had the addiction of tobacco chewing, 20% patients were having no any addiction

7. Prakriti
Maximum 50% patients were of Pitta dominant prakriti, 30% were of Kapha dominant prakriti while 20% were of Vata dominant prakriti. So the incidence was found higher in Pitta dominant prakriti.

8. Etiology
Incidence were equal according to causative factor i.e. 50% of patients were having traumatic history and 50% were of no any known cause.

9. Site
Incidence of cellulitis were found maximum 65% (n=13) in lower extremities, and 15% in upper extremities, 10% in scrotum, 5% in chest wall and 5% in other region (over left knee joint).

DISCUSSION
Prevalence of cellulitis was more in age group above 40 years as this is most active phase of people. This age group is more prone to infections due to risk of blunt or sharp injury during travelling, other routine work, and improper hygiene. A study presented total of 7438 new cases of cellulitis occurred between 1 January 1997 and 31 December 2002, result was highest in both females and males aged 45–64 years.

The incidence was more in farmer might be because of lack of awareness, poor hygiene and all time working in farm house while educated person are more aware about disease. Patients belong to rural area were affected more it is probably due to lack of medical facilities, sanitation, education and ignorance of disease in rural area as compared to urban.
According to Ayurveda non vegetarian diet may enhance the possibility of disease by vitiating doshas. It is also aggravate the infection. Addiction of tobacco chewing was found more, it is due to tobacco contains nicotine and it aggravate incidence of infection. A study shows nicotine is responsible for the inhibitory effects on the immune responses. 

Pitta dominant patients were found more might be due to the characters of Pitta are more similar to features of inflammation like redness, raised temperature, fever, pain. The most common anatomical site of cellulitis infection was the lower extremity. Many studies have found a higher prevalence of lower extremity cellulitis infections than upper extremity infections. This is probably due to lower limb are the most dependent and peripheral part of body and has comparative poor circulation (circulation of blood against gravity) so the chances of infection are more common. The incidence of filariasis was found in 10% of cases associated with cellulitis. Lymphoedema has been shown in several studies to be the strongest risk factor for cellulitis.

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