



ETIOPATHOLOGICAL STUDY OF VATIKA HRIDROGA (ISCHEMIC HEART DISEASE)

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ABSTRACT

In Ayurvedic classical texts, clinical features of heart diseases are mentioned in the context of *Hridroga*, and features of IHD especially resemble those of *Vatika Hridroga* presented with the cardinal feature of *Ruja* (pain dominant heart disease) to overcome this problem many new Coronary Care Units are being established but the west has failed in bringing down the morbidity and mortality of much significance by this approach. Keeping this point in view in order to check the etiological factors, the present study has been undertaken. For this purpose, 50 patients were selected randomly from OPD & IPD of Rishikul Campus Haridwar. Proper history was taken in a specially designed proforma to evaluate the most common *Nidanas*. From this study, it was found that there is a definite role of *Aharaja*, *Viharaja*, and *Manasik Nidanas* in *Vatika Hridroga*. This study can be beneficial in preventing the occurrence and recurrence of disease by adopting *Nidana Parivarjanam*.

Keywords: *Vatika Hridroga*, *Ayurvedic*, osteopathological study.

INTRODUCTION

Noncommunicable disease (NCD) is a medical condition or disease that is not caused by an infectious

agent. NCDs can refer to chronic diseases which last for longer periods of time and progress slowly.

These are a group of four diseases which mainly include cardiovascular diseases, cancer, chronic respiratory diseases, and diabetes. All of those are equally deadly but among all these cardiovascular diseases is the topmost cause of death in the world. The increasing stress during work and rapid industrial growth, changing dietary habits and intake of foods such as preserved food items and fruits, the excess number of soft drinks and beverages, canned foods along with sedentary lifestyle result in the disturbance of *Agni* or metabolism and ultimately lead to various chronic and non-communicable diseases. Among cardiovascular illnesses, ischemic heart disease (IHD) ranks as the most prevalent¹ also referred to as coronary artery disease (CAD) and atherosclerotic cardiovascular disease (ACD), IHD manifests clinically as myocardial infarction and ischemic Cardiomyopathy. An increasing number of individuals with non-fatal IHD live with chronic disabilities and impaired quality of life². The primary pathological process that leads to IHD is atherosclerosis, an inflammatory disease of the arteries associated with lipid deposition and metabolic alterations due to multiple risk factors. Most cardiovascular diseases can be prevented by addressing behavioral risk factors such as tobacco use, unhealthy diet and obesity, physical inactivity, and harmful use of alcohol stated to WHO.

The annual number of deaths from CVD in India is projected to rise from 2.26 million (1990) to 4.77 million (2020)³. Coronary heart disease prevalence rates in India have been estimated over the past several decades and have ranged from 1.6% to 7.4% in rural populations and from 1% to 13.2% in urban populations⁴

OBSERVATION AND RESULTS

Table 1: Incidence of Age in 50 patients of Vatika Hridroga

AGE	No of patients	Percentage (%)
18-39 years	13	26%
40-60years	37	74%

Hridaya is considered one amongst ten ‘*Pra-nayatana*’; is one of the three *Marmas* (vital parts) of the body⁵. *Hridroga* is considered to be one of the incorporated facets related to *Rasavaha Srotas* (cardiovascular system). Due to etiological factors when *Doshas* get aggravated they cause *Agnidusti* which vitiates the *Rasa*, invades the components, and causes affliction to *Hridaya*. Affliction with *Hridaya* results in the manifestation of five types of *Hridroga*. Amongst the five types of *Hridroga*, the *Vataja Hridroga* is presented with the cardinal feature of *Ruja* (pain dominant heart disease) and shows cardiac affliction along with other symptoms as explained in *Samhitas*.

MATERIALS AND METHODS

A study was conducted on a total of 50 patients presenting with signs and symptoms of *Vatika Hridroga*. All the patients were randomly selected from OPD & IPD; Rishikul campus Haridwar. Proper history was taken in a specially designed proforma to evaluate the most common *Nidanas* (as mentioned by the classical texts). The data collected was analyzed statistically.

Inclusion Criteria

Patients in the age group 18-60 years who visited OPD/IPD of Rishikul campus Haridwar, presenting with the signs and symptoms of *Vatika Hridroga* along with significant ECG findings were selected for the study.

Exclusion Criteria

Patients with another cardiac disease except for IHD, patients suffering from uncontrolled diabetes & other chronic disorders & other systemic disorders.

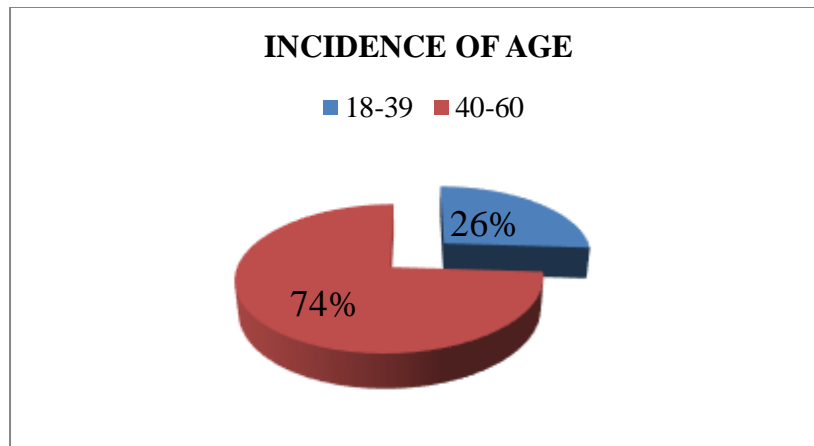


Figure 1: Incidence of age in 50 patients of Vatika Hridroga

Table 02: Incidence of Gender in 50 patients of Vatika Hridroga

SEX	No. of patients	Percentage (%)
Male	21	78%
Female	04	22%

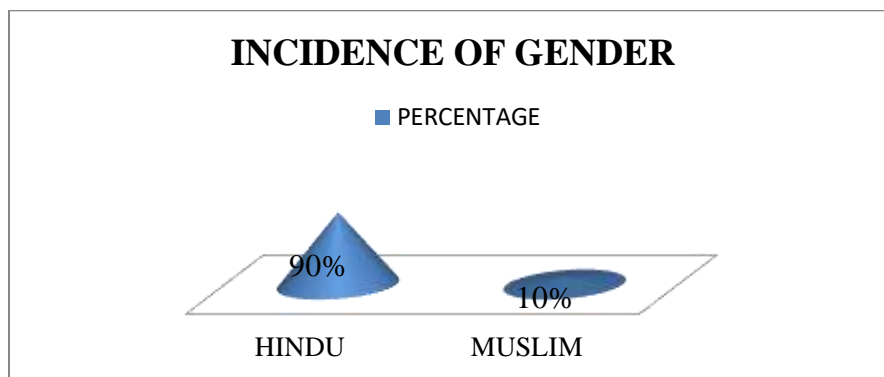


Figure 2: Incidence of Gender in 50 patients of Vatika Hridroga

Table 3: Incidence of Nidra in 50 patients of Vatika Hridroga

NIDRA	No of patients	Percentage (%)
Sound	12	24%
Disturbed	27	54%
Insomnia	11	22%

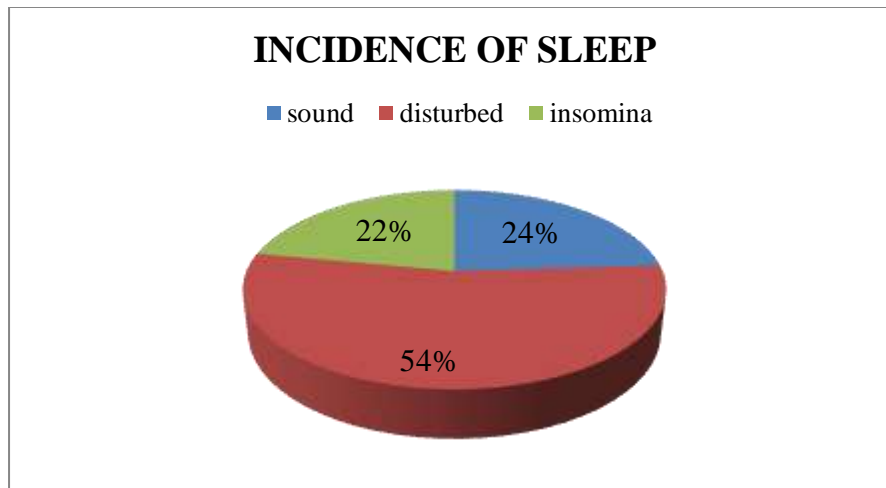


Figure 3: Incidence of Sleep in 50 patients of Vatika Hridroga

Table 4: Incidence of Addiction in 50 patients of Vatika Hridroga

ADDICTION	No of patients	Percentage (%)
TEA	14	28%
SMOKING	20	40%
ALCOHOL	05	26%
TOBACCO	13	10%
NOT ANY	04	8%

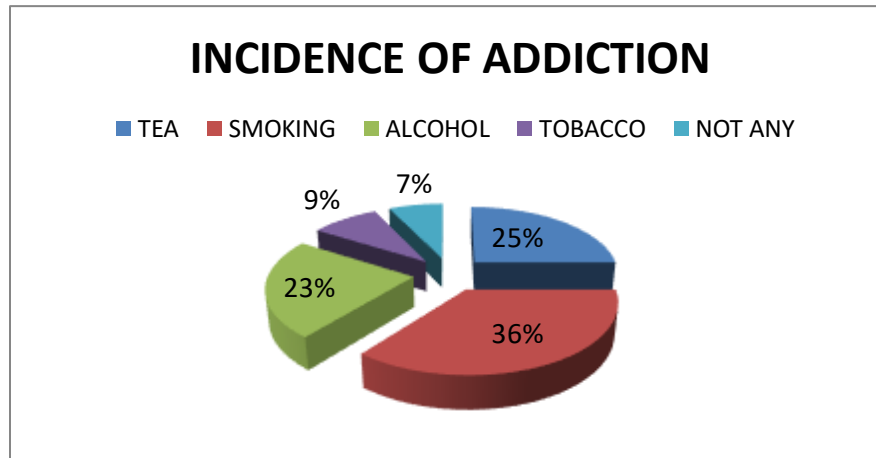


Figure 4: Incidence of Addiction in 50 patients of Vatika Hridroga

Table 5: Incidence of Samanya Nidan in 50 patients of Vatika Hridroga

Out of 50 patients, 24% of patients' history of *vegsandharana* was found, 58% were having *virrudha bhojan*, 46% were doing *Addhyasana*, 42% were having *Asatmya bhojan*, 60% patients were having *Ajirna*, while in 64% *Chinta, bhaya, Trasa* was found.

Samanya nidan	No of patients	Percentage (%)
<i>Vega Sandharana</i>	12	24%
<i>Virrudha bhojan</i>	29	58%
<i>Addhyasana</i>	23	46%

<i>Asatmya bhojan</i>	21	42%
<i>Ajrna</i>	30	60%
<i>Chinta, bahya</i>	32	64%

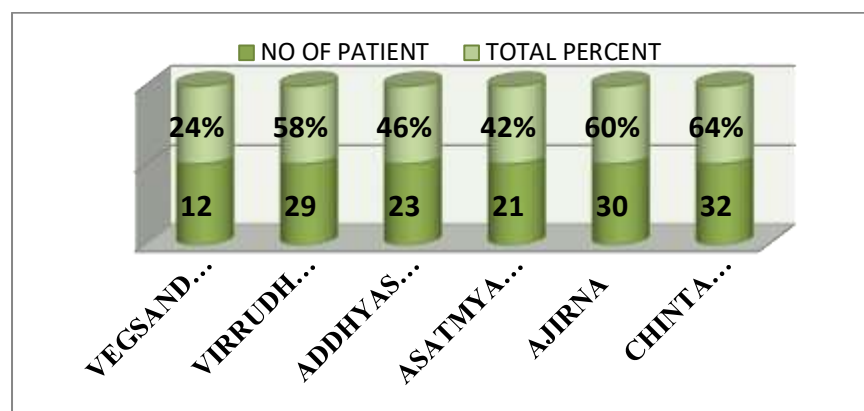


Figure 5: Incidence of Samanya nidan in 50 patients of Vatika Hridroga

Table 6: Incidence of Vishesha Nidan in 50 patients of Vatika Hridroga

Samanya nidan	No of patients	Percentage (%)
<i>Shoka</i>	32	64%
<i>Upvasa</i>	8	16%
<i>Vyayam</i>	17	34%
<i>Ruksha-Suskshma bhojan</i>	25	58%
<i>Alpa bhojan</i>	16	32%

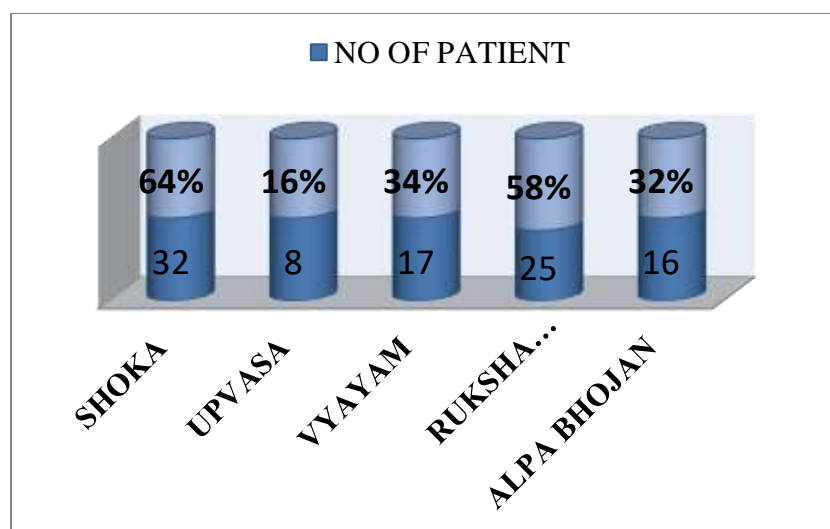


Figure 6: Incidence of vishesha nidan in 50 patients of Vatika Hridroga

DISCUSSION

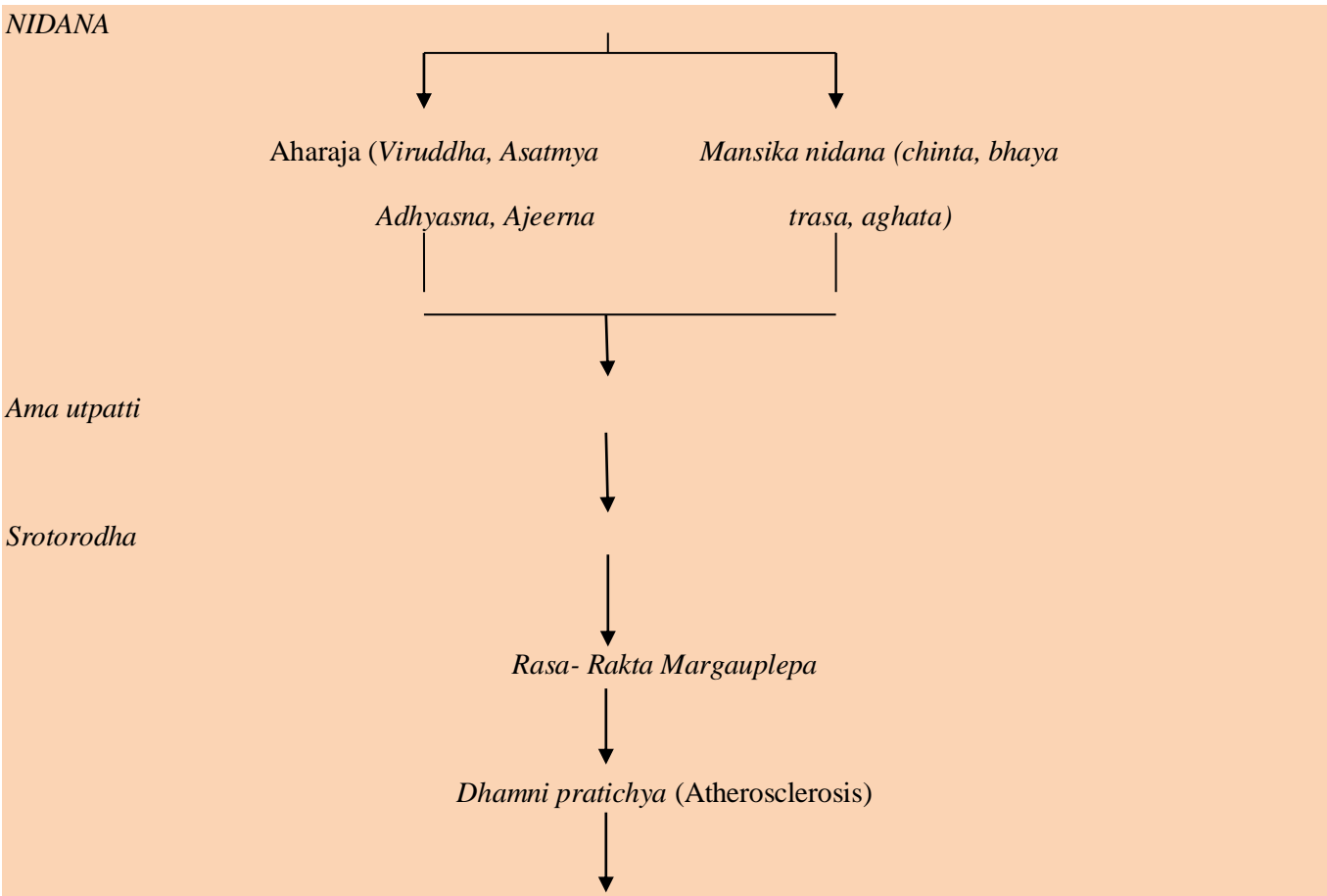
All the patients were examined for demographic and clinical profiles.

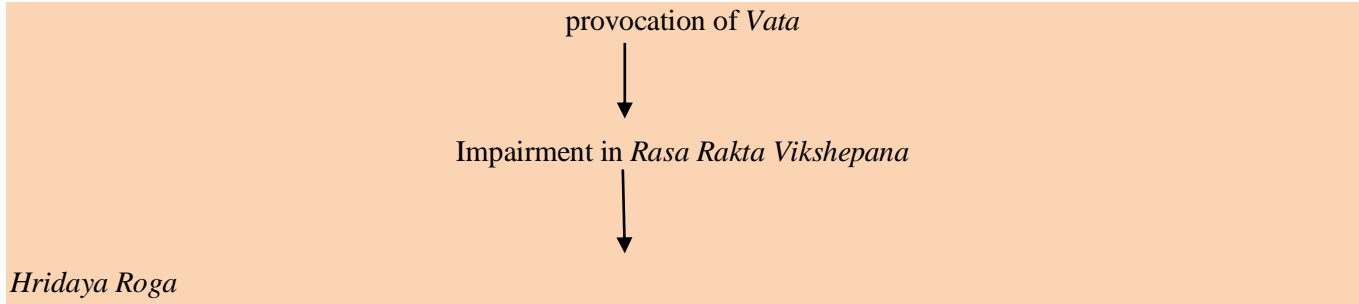
It was found that the maximum number of patients i.e., 74% belonged to the age group of 40-60 years, followed by 26% of patients 18-39 years. Physiological aging of the heart is considered a major causative factor in the onset and manifestation of CVD in aging adults. Vascular aging leads to intimal and medial thickening (vascular remodeling) as well as the gradual loss of arterial elasticity, resulting in vascular stiffness⁶ in this series, the maximum i.e., 78% of patients were male while the rest of the patients i.e., 22% were female, Comparisons between the sexes also reveal gender differences in psychosocial and behavioral coronary risk factors, including excessive alcohol consumption and smoking, favoring women. In this study majority of the patients i.e., 54% patients had disturbed sleep. 24% had sound sleep, while 22% were having Insomnia. Chronic sleep deprivation has been linked to high blood pressure, high

cholesterol, heart attack, obesity, diabetes, and stroke. Research has found that lack of sleep contributes to Atherosclerosis⁷ Poor sleep triggers chronic inflammation, which contributes to plaque formation and hardening of the arteries. There also could be an increase in stress-related hormones or other mediators. Alternatively, insomnia could just be a marker for other CVD risk factors or serious co-morbid conditions⁸.

40% of patients were having an addiction to smoking, 28% of patients were having an addiction to Tea, 26% of patients were having an addiction to Alcohol, and 10% of patients were having an addiction to Tobacco. Only 08% of patients were not having an addiction. It has been well established that cigarette smoking is a powerful risk factor for coronary artery disease. Unfavorable effects include enhancement of platelet function. Platelet activation by cigarette smoking is linked to thrombosis formation, including the onset of myocardial infarction.

NIDANA





A maximum of 64% of patients *Shoka* was found while in 26% of patients it was absent. *Shoka* is a distressful condition due to the absence or separation of loved ones (relatives, friends, sons, brothers, etc.) in whom we have affection or faith. *Manasika Nidana* like *Shoka* (Grief) involves *Rajo Dosha*. *Vata Dosha* is first aggravated followed by *Pitta Dosha* aggravation. Continuous exposure to *Shoka* for a longer period can cause *Agnivikruti*. Due to this vitiated *Rasa Dhatu* is formed and this vitiated *rasa dhatu* circulates in the heart leading to improper functioning of the heart. At the beginning of the grieving process, people are more likely to experience less sleep, low appetite, and higher cortisol levels, which can also increase heart attack risks. Grieving people also sometimes neglect regular medications, possibly leading to adverse heart events¹⁰. Stress associated with the cardiovascular disease begins with activation of both the sympathetic nervous system and the hypothalamus-pituitary-adrenal axis causing an increase in the secretion of catecholamines, glucocorticoids, and inflammatory cytokines. Cortisol is released during stress. Long-term pathologically elevated cortisol levels, as extensively described (Cushing syndrome) and in a patient using glucocorticoids are associated with increased visceral fat mass, atrophy of proximal muscles, hypertension, insulin resistance, and dyslipidemia, which all result in increased cardiovascular risk

16% of patients were practicing *upvasa* while 84% were not practicing *upvasa*. This may be because of the small sample size. *Upavasa* (Fasting) leads to *Agni and Vata Vriddhi* which causes *Shoshana* to the body and thereby causing *Dhatu kashya*¹¹

34 % patients were doing *AtiVyayam* while 66% were not doing *Ati Vyayam*. Excessive physical exertion

(*Ativyayam*) leads to *Vata Dosha and Pitta Dosha Prakopa* which will lead to *Sarva dhātu Kshaya, Ojokshaya* ultimately *Hridaya* will get affected. Excessive consumption of sweets and greasy foods in conjunction with a lack of physical activities causes morbid accumulation of the *kapha* and *medas* in the *rasa dhatu*. *Ayurveda* views it as a *kapha medovrudhi* causing *margavarodha*. This *margavarodha* when takes place in coronary vessels causes ischemic heart disease¹²

In the present study, *Ruksha-Shuksha Bhojan* was consumed by 58% of patients while 26% of patients did not have *Ruksha-Shuksha Bhojan*. Due to *Ruksha bhojana*, there is an increase in value and *Akash Mahabhut* due to which *Ruksha guna* of *Vata* increases which causes *Shoshana* to the *Snehamsha* of body and thereby causing *Rasa Kshaya* and it will lead to *Lakshans* like *Hridhrava*, etc. Having *Sushka bhojana* in the diet will increase *Prithi Mahabut (khar)*, and *Vishamta* in *Rasa Samvahana* due to which *Rasavaha srota*s is affected and the condition of *Dhatu kshaya* will develop which will lead to *Vata prakopa*. *Madya* (alcohol) has *Ruksha guna* and is opposite to *Snigdha guna of oja* and *oja is sthana of hridaya* and by *siddhanta of Ashrya Ashryi bhava Hridaya* will get affected.

Alpa bhojan was consumed by 32% of patients while 68% were not having *Alpa bhojan*. The reason may be because small sample size. *Alpa Bhojana* is responsible for *Kapha Kshaya*. *Dhatu Poshana* does not happen properly, which results in a decrease in *Snigdha and Pichil Guna of Dosha*, thus increasing *Laghu and Ruksha Guna of Vayu*, causing *Vata Prakopa* and *Gati Avarodha*.

REFERENCES

1. Global, regional, and national burden of cardiovascular diseases for 10 causes, 1990 to 2015. Roth GA, Johnson C, Abajobir A, et al. *J Am Coll Cardiol*. 2017; 70:1–25. [PMC free article] [PubMed] [Google Scholar]
2. Temporal trends in ischemic heart disease mortality in 21 world regions, 1980 to 2010: the Global Burden of Disease 2010 study. Moran AE, Forouzanfar MH, Roth GA, et al. *Circulation*. 2014; 129:1483–1492. [PMC free article] [PubMed] [Google Scholar]
3. Murray CJ, Lopez AD. Alternative projections of mortality and disability by cause 1990–2020: Global Burden of Disease Study. *Lancet*. 1997; 349:1498–504. [PubMed] [Google Scholar]
4. Gupta R, Joshi P, Mohan V, Reddy KS, Yusuf S. Epidemiology and causation of coronary heart disease and stroke in India. *Heart*. 2008; 94:16–26. [PubMed] [Google Scholar]
5. Shastri Kashinath, Chaturvedi Gorakhnath, editor. Vidyantni Commentary on Charaka Samhita of Acharya Charaka, Sutrasthana, Dashpranaayatana: chapter 29, Verse3, Varanasi: Chaukhambha Bharti Academy reprint 2008; p.576
6. North BJ, Sinclair DA. The intersection between aging and cardiovascular disease. *CircRes*. 2012 Apr 13; 110(8):1097-108. [PubMed] [Ref list].
7. National Institutes of Health (NIH). How disrupted sleep may lead to heart disease (2019, March 5). <https://www.nih.gov/news-events/nih-research-matters/how-disrupted-sleep-may-lead-heart-disease>
8. Staurt F. Quan Sleep Disturbances and Their Relationship to Cardiovascular Disease <https://doi.org/10.1177%2F1559827609331709>
9. Tammy Y N Tong. Risks of ischaemic heart disease and stroke in meat eaters, fish eaters, and vegetarians over 18 years of follow-up: results from the prospective EPIC-Oxford study *BMJ* 2019;366: 14897 <https://www.bmj.com/content/366/bmj.l4897>
10. American Heart Association Grief over losing a loved one linked to higher heart attack risk January 10, 2012
11. Madhava, Acharya YT. Madhavanidana with Madhukosa Sanskrit commentary by srivijayaraksita and Srikanthadatta on Madhavanidana of sri madhavakara. chapter1 verse 4. reprint ed. varanasi: chaukhambha orientalia:2010. p.7
12. Hegde Gajanan concept of doshas and dushyas in different cardiac disorders *IAMJ*: Volume 1; Issue 6; Nov – Dec 2013

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