

**Cardiac Syndrome X – A mystery to worry about**

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*Dear Madam*, Cardiac syndrome X, by definition means original pain without any evidence of significant CVD visualized on angiogram. Normal angiogram makes it difficult for medical practitioners to detect this syndrome. About 10-20% of persons who undergo coronarography suffers from cardiac syndrome X.<sup>1</sup> It has the highest prevalence in postmenopausal women.<sup>2</sup> Most common indication is symptoms of myocardial infarction in patients.<sup>3</sup> Recent study by Magdalena Piegza et al shows the cardiac syndrome patients suffer from anxiety disorders, depressive symptoms and sleep disturbances.<sup>4</sup>

This syndrome brings a great concern to Pakistan as already we have a high rate of anxiety disorders, heart problems and higher ratio of deaths due to CVD. A study conducted on 423 persons in a tertiary care hospital in Karachi showed the mean anxiety value to be 28.3%.<sup>5</sup> A complete diagnosis of the syndrome requires proper checkup and follow up, but inadequate procedural managements culminating due to lack of interest and awareness raise a high risk of cardiac syndrome X in Pakistan. A thorough online literary search on the PubMed did not find a single article about this issue pointing to the lack of interest and awareness among the medical practitioners of Pakistan. It has to be made sure by creating awareness driven by seminars and workshops to apprise doctors about this syndrome.

A study by the Institute for Health Metrics and Evaluation found that 38% of deaths in Pakistan are due to ischaemic

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heart diseases.<sup>6</sup> This increases the chances of cardiac syndrome X among the local population. Due diligence in medical care and follow up must be applied to patients reaching out with past history of anxiety disorders and ischaemic heart problems. Common public awareness is also important and doctors should emphasize on ensuring proper lifestyle including diet, exercise, smoking cessation and weight reduction.

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**References**

1. Lutfi MF. Anxiety Level and Cardiac Autonomic Modulations in Coronary Artery Disease and Cardiac Syndrome X Patients. *PLoS One* 2017;12:e0170086. doi: 10.1371/journal.pone.0170086
2. Agrawal S, Mehta PK, Bairey Merz CN. Cardiac Syndrome X: update 2014. *Cardiol Clin* 2014;32:463-78. doi: 10.1016/j.ccl.2014.04.006
3. Jones E, Eteiba W, Merz NB. Cardiac syndrome X and microvascular coronary dysfunction. *Trends Cardiovasc Med* 2012;22:161-8. doi: 10.1016/j.tcm.2012.07.014
4. Piegza M, Wierzbica D, Piegza J. Cardiac syndrome X - the present knowledge. *Psychiatr Pol* 2021;55:363-75. doi: 10.12740/PP/OnlineFirst/113196.
5. Khan H, Kalia S, Itrat A, Khan A, Kamal M, Khan MA, et al. Prevalence and demographics of anxiety disorders: a snapshot from a community health centre in Pakistan. *Ann Gen Psychiatry* 2007;6:30. doi: 10.1186/1744-859X-6-30
6. Institute for Health Metrics and Evaluation (IHME). Pakistan: Quick Facts. [Online] 2021 [Cited 2024 September 28]. Available from URL: <https://www.healthdata.org/research-analysis/health-by-location/profiles/pakistan#main-content>

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OF: Agreement to be accountable for all aspects of the work.