



# **Dual left Anterior Descending Artery Circulation : A Rare Anomaly Of The Coronary Artery-A Case Report**

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## **ABSTRACT**

The two coronary arteries, RIGHT and LEFT Coronary arteries, branch from the ascending aorta and supply the oxygenated blood to the myocardium.

The Left Coronary artery passes inferior to the Left Auricle and divides into the Anterior Interventricular and Circumflex branches.

The Anterior Interventricular branch or Left Anterior Descending (LAD) artery is in the Interventricular sulcus and supplies oxygenated blood to the walls of both ventricles.

Since Coronary Arteries deliver blood to the heart muscle, any coronary artery disorder or disease can have serious implications by reducing the flow of oxygen and nutrients to the heart muscle. This can lead to a heart attack and possibly Death.

80%[sometimes 100%] blockage of Left Anterior Descending (LAD) Artery cause Heart Attack which is called as Widowmaker Heart Attack. Hence the knowledge of LAD plays a key role in treating CAD.

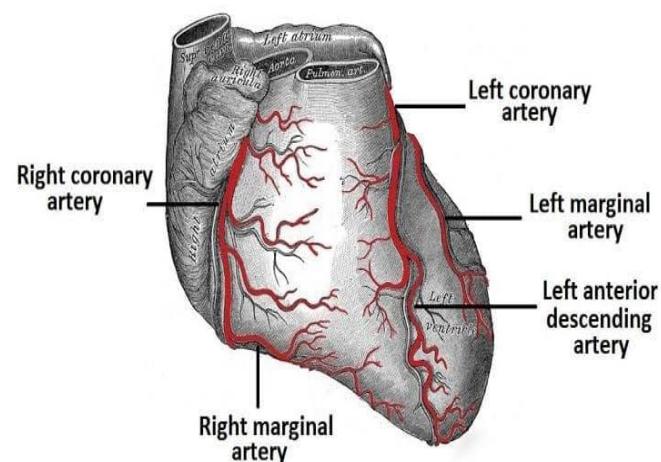
**Keywords:** Left anterior descending artery (LAD), Heart Attack, Coronary Circulation

## DESCRIPTION

In normal participants, the left anterior descending (LAD) artery arises from the left coronary artery (LCA) and courses along the anterior interventricular sulcus (AIVS) until it reaches the apex. Dual LAD circulation is an uncommon coronary anomaly in which there are two LAD arteries.

This is a very rare anomaly of the coronary arteries.

It is observed in 1% of general population.



## IN NORMAL CONDITION,

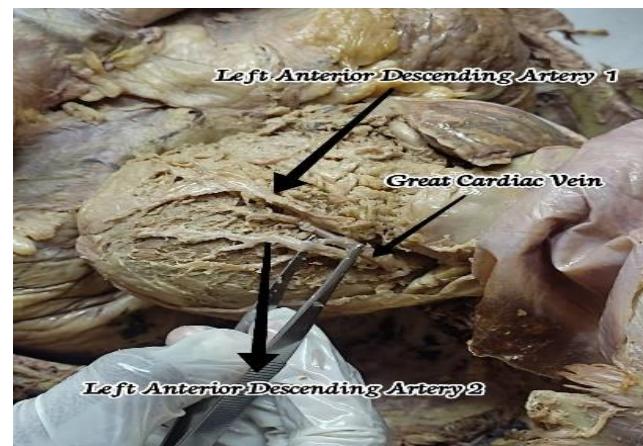
In normal condition, the left coronary artery divides into the anterior interventricular and circumflex branches. The normal condition is shown in Image no.1.

Anterior interventricular artery also known as Left Anterior Descending Artery

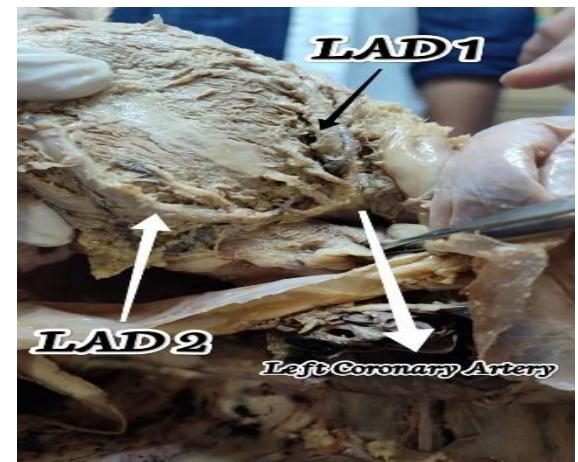
Dual Left Anterior Descending Artery (LAD) is a rare phenomenon that occurs in less than 1% of population. This Dual condition is shown in image no. 2

## ABNORMAL CONDITION,

During routine UG dissection of 60 year old cadaver, a rare anomaly of Coronary Arteries i.e Dual LAD was found. The usual condition of branches of Left Coronary Artery are the Left interventricular artery which is also known as Left Anterior Descending Artery (LAD) and Circumflex Artery.



The anomaly condition that is the second LAD found has been descended down as branch of Left Coronary Artery.



## **CONCLUSION**

In present scenario, the Cardiovascular Disease are considered as the most fatal diseases as it is the cause for majority of death in India in day to day Life. Hence it is very much essential for family physician and cardiologist to think from point of view of dual LAD as well.

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