



Doubt Clearing Session

Course on Human Physiology: Body Fluids & Circulation

ischcemic Heart Disease

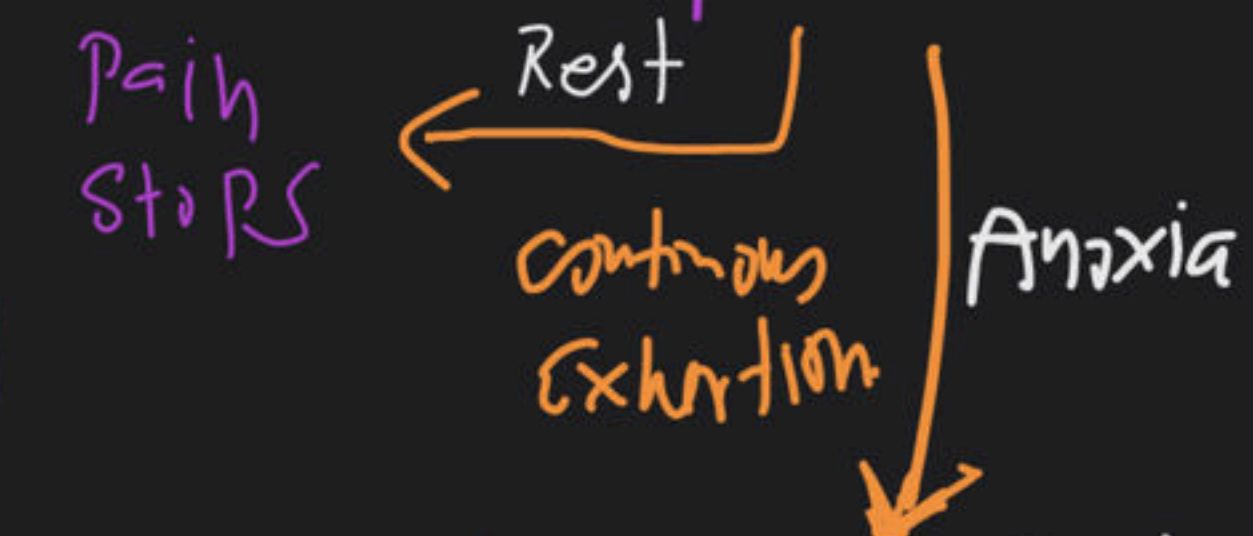
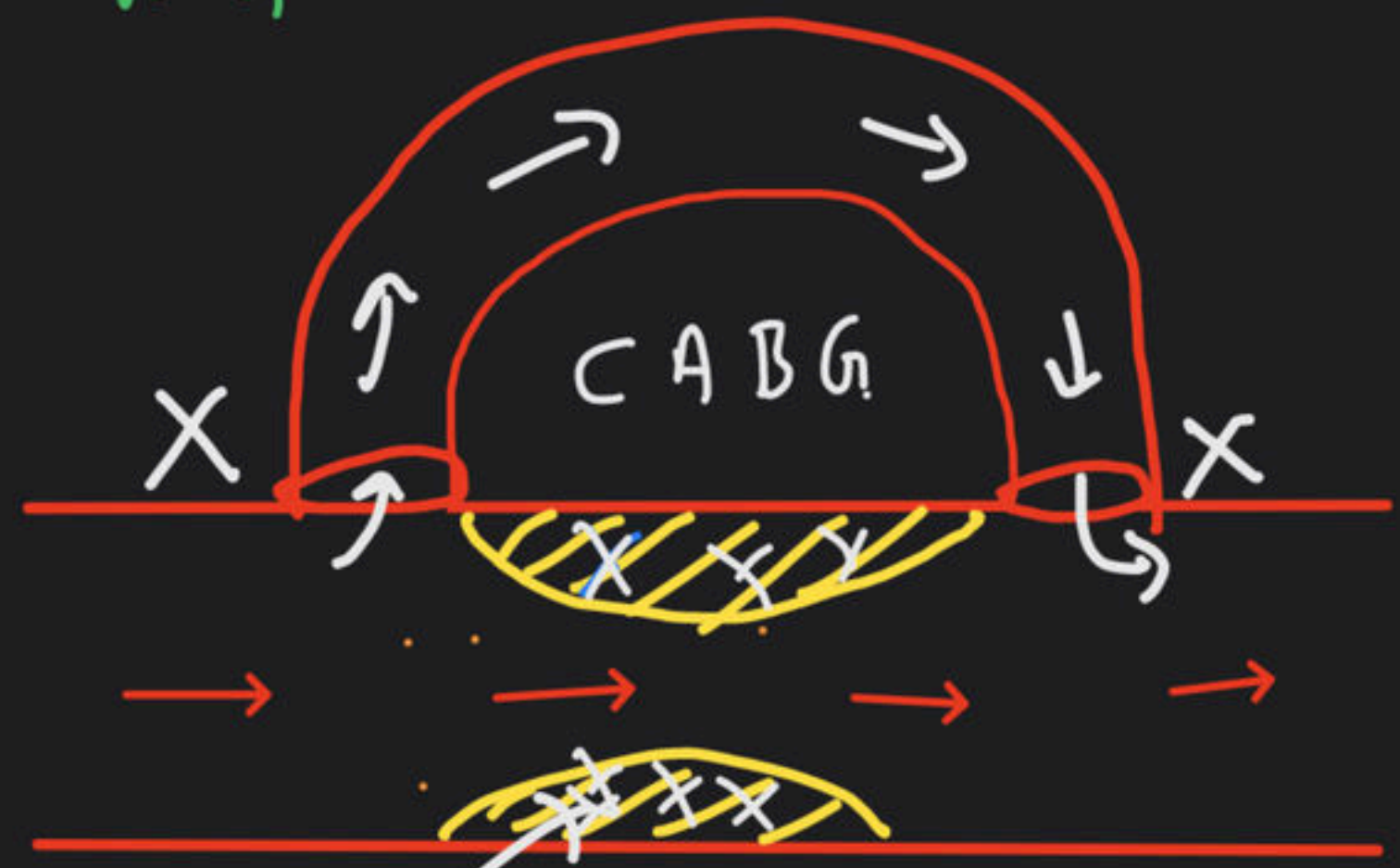
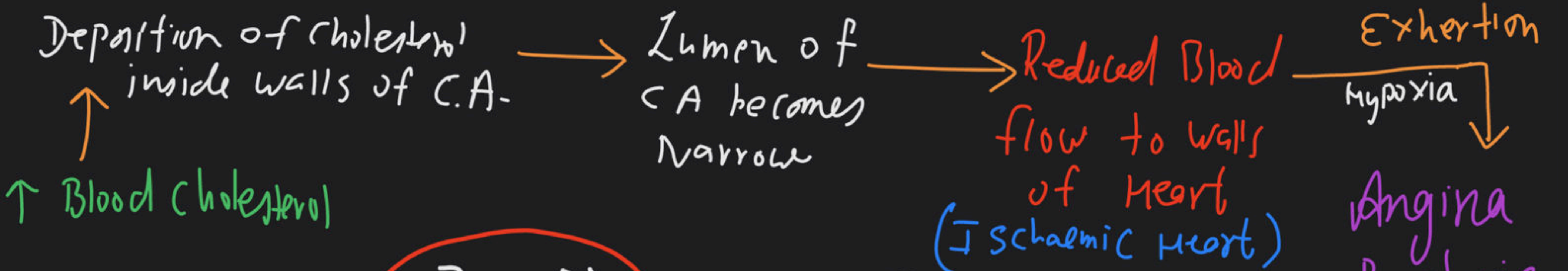
I Schaemia

→ Condition of Reduced Blood



Hypoxia

→ Condition of Lesser O_2 Supply
than demand



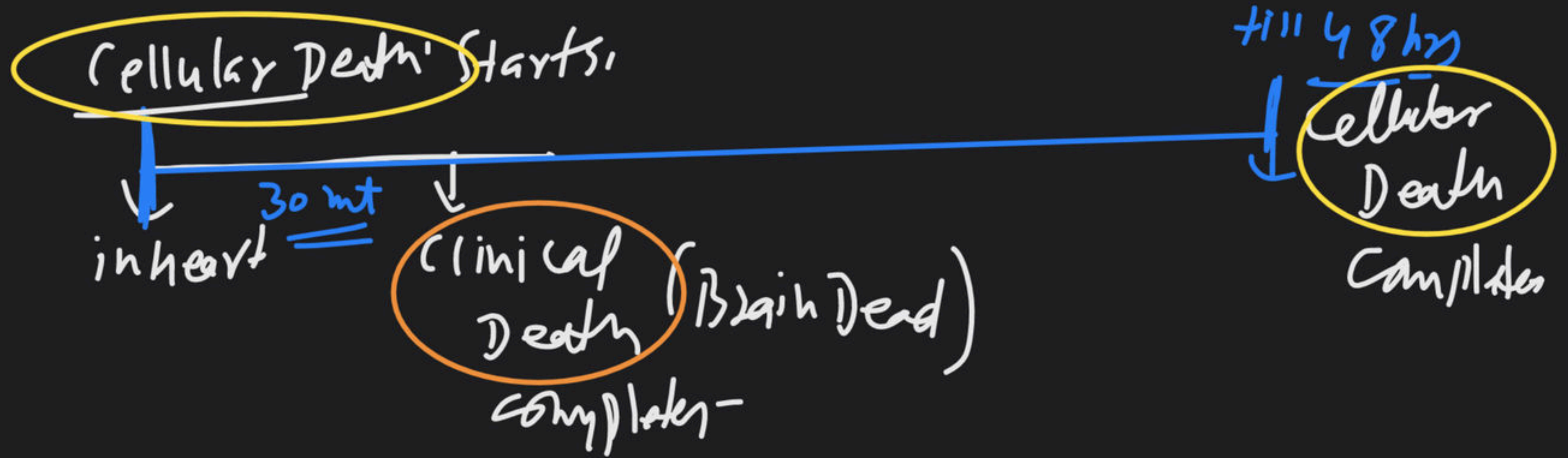
Necrosis (Death Start)

Continuous Anoxia → Heart Attack

Myocardial Infarction (Death Complete)

angiography
Angio Plasty (Repair)

Sclero = Hard
Coronary Artery By-pass Grafting.

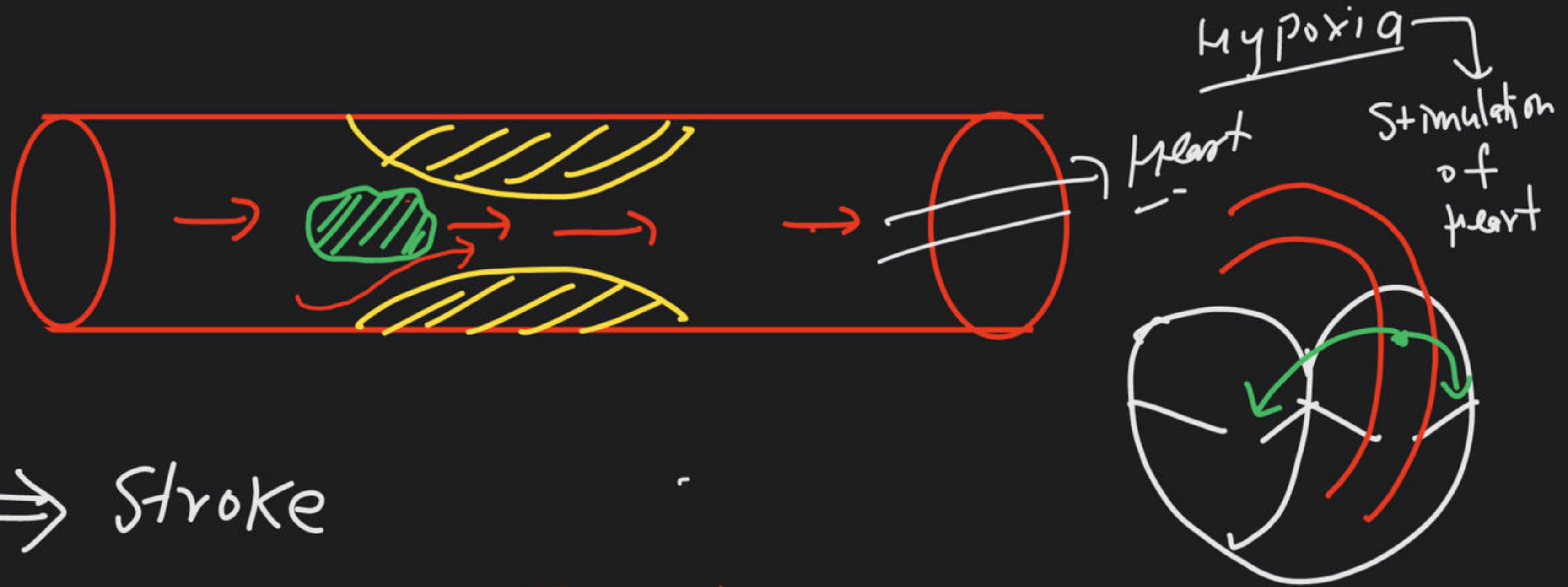


Cardio Pulmonary Resuscitation CPR 4:1
Compression: ventilation.

Cerebral infarction \equiv Brain Death (Clinical Death) $\xrightarrow[48 \text{ hours. (Cadaveric Transplantation are possible)}]{}$ Cellular Death Completes

NEET

With each successive heart attack amount of living cardiac tissue goes on decreasing



Cerebral Thrombosis \Rightarrow Stroke

Coronary Thrombosis

Rx \rightarrow Streptokinase (clot buster)

Rx - vasodilator.

NEET

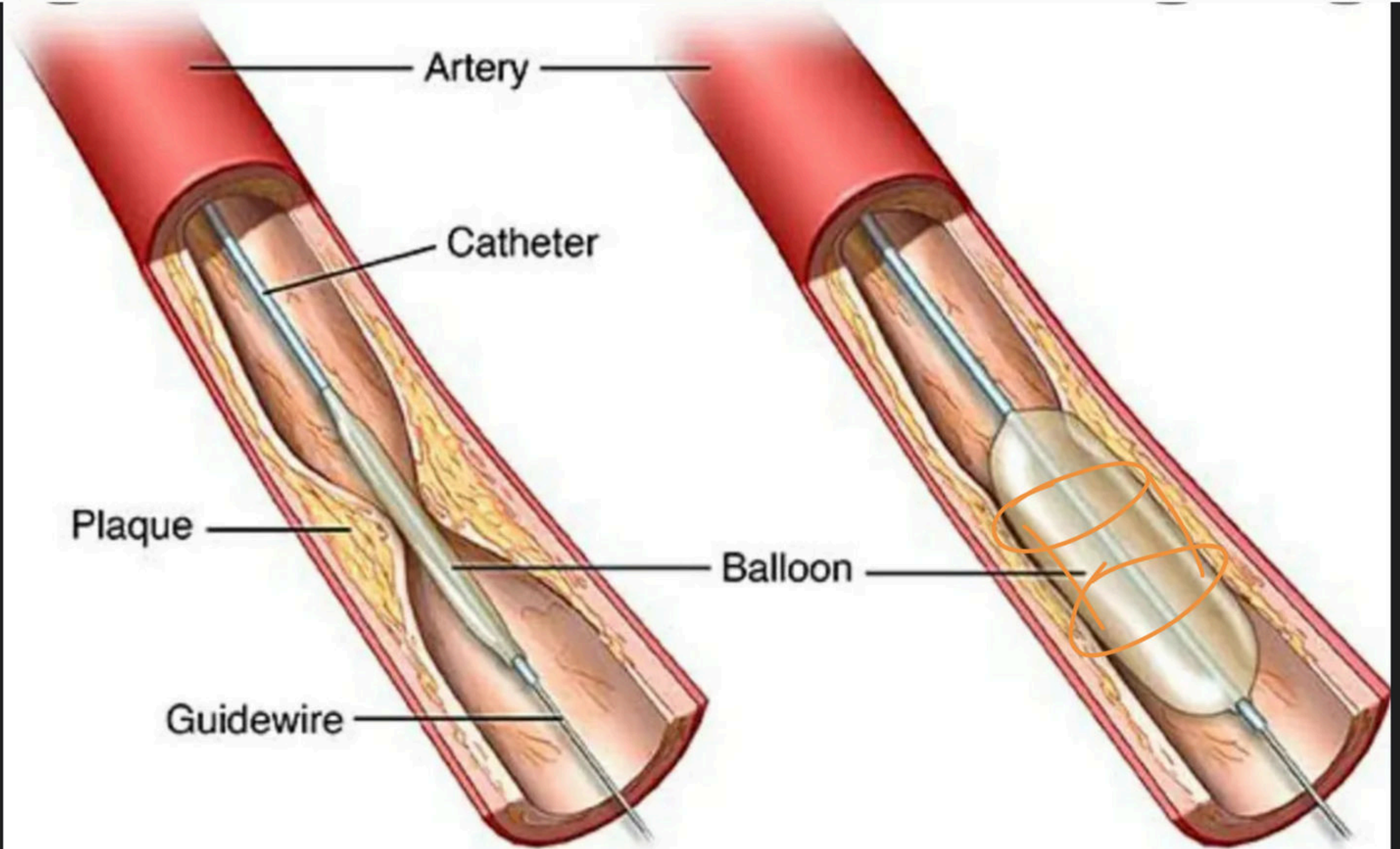
✓
Xenotransplantation

(Pig)

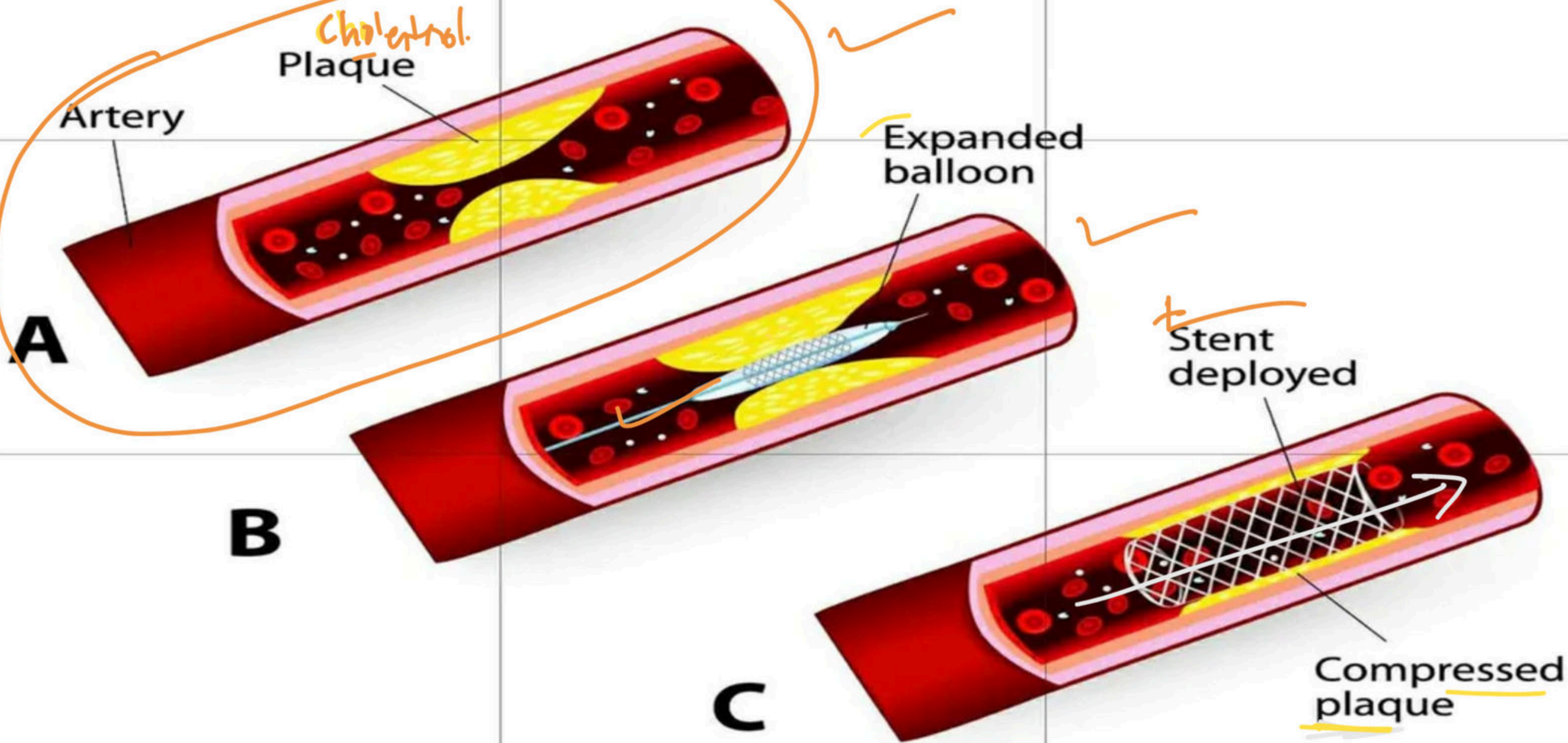
A Blockage in which Branch of
CA is most fatal

✓ LAD Branch of CA

(Widow's Artery)



ANGIOPLASTY



Ischemic heart diseases

If the lumen of any of the coronary artery gets narrowed due to obstruction or cholesterol deposition, the cardiac tissues enter a condition of more demand and less supply whenever the person performs exertion. Under such hypoxic conditions a pain might arise in heart muscles, this condition is called **Angina Pectoris**. This condition is reversible when the demand supply ratio is restabilised. (i.e. when the person stops exertion and rests). A coronary artery by pass grafting (CABG) may be required to provide additional channel of blood supply in such cases.

In coronary artery By pass grafting a part of internal mammary artery or a segment of patients own saphenous vein is used as the By pass channel.

Myocardial Infarction (M.I.) - This is cellular death of cardiac tissue due to anoxia.

When the blood supply to the heart completely stops due to complete blockage of a coronary artery, under reduced oxygen condition the heart tries to reestablish the blood supply by working even harder, thus aggravating the situation even further. Due to this reason the cardiac tissue starts dying by necrosis and myocardial infarction sets in, this is an irreversible condition. It is also called as HEART ATTACK in common language.

A blockage of left anterior descending artery (LAD) can be most fatal for the heart, (widows artery)

