

# ISCHAEMIC HEART DISEASES SAMEH IBRAHIM SERSAR MD FRCSCTS SAMEH001@MANS.EDU.EG



## **OBJECTIVES: TO HAVE AN IDEA ABOUT ISCHAEMIC HEART DISEASES.**

IN 1974, ANDREAS GRUENTZIG COMPLETED THE DEVELOPMENT OF A DOUBLE-LUMEN BALLOON CATHETER THAT WAS MINIATURIZED FOR USE IN CORONARY ARTERIES. SOON AFTERWARD, TECHNIQUES FOR PERCUTANEOUS TRANSLUMINAL **CORONARY ANGIOPLASTY (PTCA) EXPANDED AS** TECHNICAL BREAKTHROUGHS WERE APPLIED TO SUBSELECTIVE CATHETERS, DEVICES, GUIDEWIRES, BALLOON MATERIALS, CORONARY STENTS, AND **CIRCULATORY SUPPORT.** 

CURRENTLY, TRIAL EVIDENCE ATTESTS THAT PERCUTANEOUS THERAPY IS USEFUL AS A TREATMENT IN PATIENTS WITH POORLY CONTROLLED ANGINA WHOSE ANATOMY DOES NOT IMPLY A SURVIVAL BENEFIT FROM REVASCULARIZATION, AND FOR EMERGENCY REVASCULARIZATION DURING ST-SEGMENT ELEVATION MYOCARDIAL INFARCTION (MI). SURGICAL AND PERCUTANEOUS REVASCULARIZATION, HOWEVER, CANNOT BE CONSIDERED EQUIVALENT

# CAUSES OF DEATH AFTER CARDIAC CATHETERIZATION:

LOW-OUTPUT FAILURE 66.1% VENTRICULAR ARRHYTHMIAS 10.7% STROKE 4.1% PREEXISTING RENAL FAILURE 4.1% BLEEDING 2.5% VENTRICULAR RUPTURE 2.5% RESPIRATORY FAILURE 2.5% PULMONARY EMBOLISM 1.7% INFECTION 1.7%

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ANGIOPLASTY. BALLOON ATHERECTOMY ATHERECTOMY ATHERECTOMY (MECHANICAL) (MANUAL) REVASCULARIZATION WITH CARDIOPULMONARY BYPASS BEGAN IN 1954 WHEN DR. JOHN GIBBON REPORTED THE DEVELOPMENT OF THE CARDIOPULMONARY BYPASS MACHINE.

AN ADDITIONAL SEMINAL ADVANCE OCCURRED WITH THE DEVELOPMENT OF CORONARY ANGIOGRAPHY BY MASON SONES AT THE CLEVELAND CLINIC IN 1957, WHICH OPENED THE DOOR TO THE ELECTIVE TREATMENT OF CORONARY ATHEROSCLEROSIS BY MEANS OF DIRECT REVASCULARIZATION.

**INITIAL REPORTS BY RENE FAVALORO AND** DONALD B. EFFLER ON THEIR TECHNIQUES TO TREAT CLINICAL EVENTS ASSOCIATED STENOTIC LESIONS OF WITH THE **CORONARY ARTERIES CULMINATED IN THE** FIRST LARGE SERIES OF AORTO-TO-CORONARY ARTERY VENOUS GRAFTS **REPORTED IN 1969. SIMULTANEOUSLY** DUDLEY JOHNSON OF **MILWAUKEE PUBLISHED A SERIES OF 301 PATIENTS IN** 1969.

#### BYPASS CONDUITS

### 1.INTERNAL THORACIC ARTERY.

2.RADIAL ARTERY.

3. THE GASTROEPIPLOIC ARTERY (GEA) FOR THE MOST PART IS UTILIZED AS AN ALTERNATIVE CONDUIT OR AS PART OF AN ALL-ARTERIAL REVASCULARIZATION STRATEGY

4. GREATER SAPHENOUS VEIN.

5.LESSER SAPHENOUS.

6. CEPHALIC VEINS.





# REFERENCES: 1. CARDIAC SURGERY IN THE ADULT. LAWRANCE H COHN AND L HENRY EDMUNDS. 2. KEY QUESTIONS IN CARDIAC SURGERY. NARAIN MOORJANI

