# Case Study Report

Patient Name: Sanath Kumar

**Age:** 52

Gender: Male

Date of Admission: March 10, 2025

Date of Report: May 14, 2025

**Hospital/Clinic:** Medilife Specialty Hospital **Consultant:** Dr. Priya Mehra, MD (Cardiology)

Medical Record Number: MRN245790

#### 1. Chief Complaints

- Recurrent episodes of chest discomfort, particularly post meals
- Mild shortness of breath during exertion
- Skin rashes and itching after consumption of certain foods
- Occasional dizziness and headaches

#### 2. Past Medical History

- Diagnosed with hypertension 8 years ago; on medication (Amlodipine 5 mg daily)
- Family history of ischemic heart disease
- No history of diabetes
- Known allergy to **shellfish** and **peanuts**, identified through skin prick testing at age 45

# 3. Present Illness History

Sanath presented with chest discomfort following a family dinner that included shellfish. Symptoms included:

- Tightness in chest (lasting 15–20 minutes)
- Flushed skin and itching over arms and chest
- Elevated blood pressure at 160/95 mmHg
- ECG changes suggestive of early ischemic changes

Following stabilization, he was admitted for further cardiac evaluation and allergy testing.

Result

#### 4. Examination Findings

**Parameter** 

Blood Pressure	158/94 mmHg
Heart Rate	92 bpm
Oxygen Saturation	97% on room air
Respiratory Rate	20/min
ВМІ	28.4 (Overweight)
Skin Exam	Urticarial rash on arms

### 5. Investigations

Cardiovascular

Exam

Lungs

• ECG: Mild ST depression in lateral leads

murmur

Clear, no rales

• Echocardiogram: Mild concentric left ventricular hypertrophy, EF 55%

• Lipid Profile: Elevated LDL (145 mg/dL), Low HDL (36 mg/dL)

Normal heart sounds, no

- Allergy Panel (RAST): High IgE response to shellfish and peanut proteins
- CBC: Normal
- Liver & Kidney Function Tests: Within normal limits

### 6. Diagnosis

- 1. Essential Hypertension (Stage 1)
- 2. Coronary Artery Disease (Stable Angina, suspected)
- 3. Food Allergy (Shellfish and Peanuts IgE mediated)

# 7. Management Plan

#### Pharmacological:

- Antihypertensives: Switched to Telmisartan 40 mg once daily
- Antihistamines: Cetirizine 10 mg as needed for allergic symptoms
- Cardiac protection: Aspirin 75 mg daily, Atorvastatin 20 mg
- Nitroglycerin: Sublingual tablets for angina as needed

#### Lifestyle & Dietary Advice:

- Complete avoidance of shellfish and peanuts
- Referred to **dietitian** for allergen-free cardiac diet
- Low-sodium, low-fat meal plan
- Weight loss goal: 5-7 kg over 6 months
- Exercise: Brisk walking 30 minutes, 5 days a week

#### Emergency Plan:

- Prescribed EpiPen (epinephrine autoinjector) for anaphylaxis
- Educated on allergen avoidance, food label reading, and symptoms of allergic reaction

# 8. Prognosis

With compliance to medications, allergen avoidance, and lifestyle modification, Sanath's prognosis is favorable. Early detection of cardiac involvement allows for preventive management to avoid progression.

#### 9. Follow-Up

- Next Cardiology Review: In 6 weeks
- Allergy Specialist Appointment: Scheduled in 2 weeks
- Regular monitoring of blood pressure and lipid levels every 3 months

#### Prepared By:

Dr. Priya Mehra Consultant Cardiologist Medilife Specialty Hospital