

One-year follow-up of patients with coronary artery disease in the patient-reported dimension. Bangkok Pattaya Hospital

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Introduction

The Bangkok Pattaya Hospital Heart Center has been collecting patient data using the concept of value-based healthcare and the ICHOM CAD standards since 2022. The Heart Center serves both Thai and international patients with coronary artery-related issues. Treatment follows international standards, including coronary angioplasty and coronary artery bypass grafting. The center continuously monitors both clinical outcomes and quality of life metrics, with the aim of achieving optimal treatment results, allowing patients to live longer, healthier lives.

Methods

This descriptive study was conducted on patients with aortic stenosis who received treatment at Bangkok Pattaya Hospital and had at least one follow-up appointment between August 2022 and April 2024. A total of 172 subjects were included for a 1-year follow-up using standard ICHOM datasets: the Seattle Angina Questionnaire Short-Form (SAQ-7), Rose Dyspnea Scale (RDS), and Two-Item Patient Health Questionnaire (PHQ-2).

Results

The study involved 172 participants, 73% of whom were Thai. The group consisted of 82% men and 18% women, with 76% having comorbidities, and 28% reporting limitations in daily activities. Patients were treated with either medication, coronary angioplasty, or coronary artery bypass grafting (CABG). After 1 year of follow-up, the overall mortality rate was 2.83%. Clinical outcomes, as measured using the ICHOM standard set (SAQ-7, RDS, and PHQ-2), were analyzed using descriptive statistics and the Wilcoxon Signed Rank test. Patients diagnosed with stable coronary artery disease showed significant improvements across SAQ-7, RDS, and PHQ-2 scores ($p < 0.05$).

Patients with stable angina who were treated with medication, balloon angioplasty, or CABG were evaluated before and after treatment with 1-year follow-up. From the patient's perspective, the following improvements were observed:

Participants

Total: 172

Thai: 73%

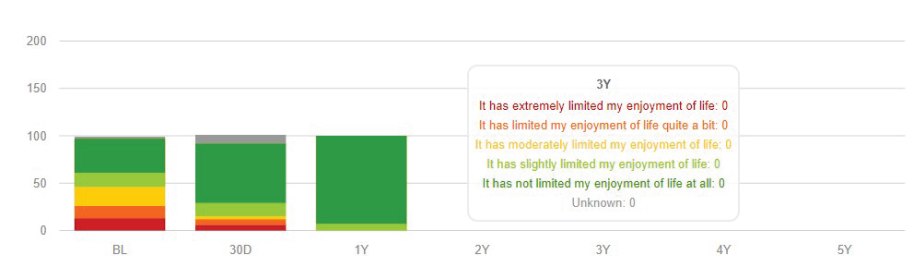
18%
Female

82%
Male

50% experiencing problems with limiting daily life

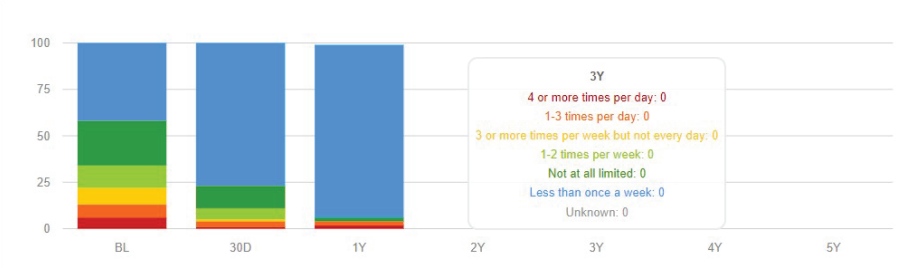
76% With co-morbidities

SAQ-7.6. Over the past 4 weeks, how much has your chest pain, chest tightness or angina limited your enjoyment of life? (%)



No chest tightness:
increased from 41% to 93%

SAQ-7.4. Over the past 4 weeks, on average, how many times have you had chest pain, chest tightness or angina? (%)



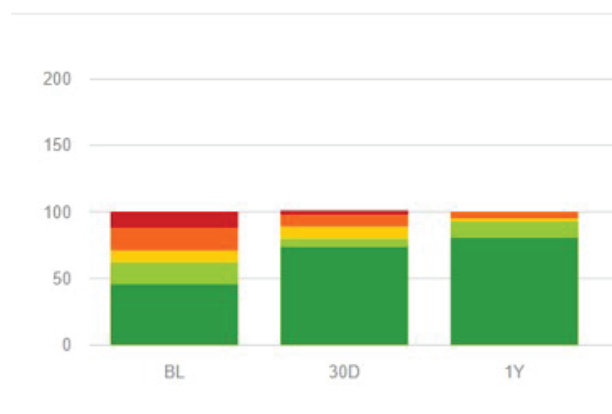
No activity restrictions due to
chest tightness:
increased from 36% to 93%

PHQ-2 Score (%)



Concern about the disease:
decreased from 25.9% to 11.6%

ROSE Dyspnea (%)



No fatigue during
strenuous activities:
increased from 46% to 81%

In terms of clinical outcomes, acute complications from treatment were as follows: death within 30 days of surgery or during hospitalization for surgery, stroke within 30 days of procedure, stroke, and acute renal failure in PCI and CABG patients = 0%

Clinical Outcomes in Stable Angina, Atherosclerosis Group

- 0% CABG 30-day mortality
- 0% Acute renal failure
- 0% Stroke
- 0% Re-Operation in CABG
- 0% No major complications in the coronary angioplasty group

Conclusions

Currently, the treatment of coronary artery disease involves modern medical equipment and technology, with international standard treatment options available as appropriate for each patient. At Bangkok Pattaya Hospital, there has been continuous development in patient care, with clear guidelines for heart surgery and coronary artery procedures. This has led to favorable clinical outcomes, but equally important are the results related to patients' quality of life. The ICHOM CAD standard set plays a crucial role in helping the hospital assess tangible outcomes, supporting its commitment to value-based healthcare.



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