**Management of Stent Thrombosis Case Reports** accepts articles focusing on the diagnosis, treatment, and prevention of stent thrombosis in the form of case reports, case series, video case reports, brief communications, commentaries, and editorials. The goal of the open-access, peer-reviewed **Case Reports and Case Series in Cardiology Journal** is to publish high-impact, clinically relevant reports that improve patient outcomes in complex coronary interventions.

Stent thrombosis is a rare but life-threatening complication following percutaneous coronary intervention (PCI), often presenting as acute myocardial infarction or sudden cardiac death. It occurs due to thrombus formation within or adjacent to a previously implanted coronary stent, leading to abrupt vessel occlusion and compromised myocardial perfusion.

**Types of Stent Thrombosis**

Stent thrombosis is classified based on the timing of occurrence after stent implantation:

- **Acute Stent Thrombosis:** Occurs within 24 hours of stent placement
- **Subacute Stent Thrombosis:** Occurs between 1 to 30 days
- **Late Stent Thrombosis:** Occurs after 30 days up to 1 year
- **Very Late Stent Thrombosis:** Occurs after 1 year

Each type has different underlying mechanisms, risk factors, and management strategies.

**Causes and Risk Factors**

Several factors contribute to stent thrombosis, including:

- Premature discontinuation of dual antiplatelet therapy (DAPT)
- Stent under-expansion or malapposition
- Complex coronary lesions (e.g., bifurcation, long lesions)
- Diabetes mellitus and renal dysfunction
- Hypercoagulable states
- Procedural complications

Understanding these factors is essential for prevention and optimal management.

**Clinical Presentation**

Stent thrombosis typically presents as an acute coronary syndrome, often severe and sudden. Common clinical features include:

- Chest pain (angina)
- ST-segment elevation myocardial infarction (STEMI)
- Hemodynamic instability
- Arrhythmias
- Sudden cardiac arrest in severe cases

Prompt recognition is critical for life-saving intervention.

**Diagnostic Approaches**

Diagnosis is usually confirmed through:

- Coronary angiography demonstrating thrombotic occlusion
- Intravascular imaging (IVUS or OCT) to assess stent expansion and apposition
- Electrocardiogram (ECG) changes suggestive of acute ischemia
- Cardiac biomarkers indicating myocardial injury

**Management Strategies**

Management of stent thrombosis is an emergency and requires rapid intervention:

**Immediate Treatment:**

- Primary PCI with thrombus aspiration
- Balloon angioplasty or repeat stenting if required
- Use of glycoprotein IIb/IIIa inhibitors in selected cases

**Pharmacological Therapy:**

- Dual antiplatelet therapy (aspirin + P2Y12 inhibitor)
- Anticoagulation (heparin or bivalirudin)
- Intensification or modification of antiplatelet regimen

**Adjunctive Measures:**

- Optimization of stent deployment using imaging guidance
- Correction of underlying mechanical issues
- Hemodynamic support in unstable patients

**Complications**

If not promptly treated, stent thrombosis can lead to:

- Extensive myocardial infarction
- Cardiogenic shock
- Ventricular arrhythmias
- Sudden cardiac death

**Role of Case Reports**

This section encourages submission of case reports that highlight:

- Early recognition and emergency management
- Complex or recurrent stent thrombosis cases
- Role of imaging (IVUS/OCT) in diagnosis and management
- Novel pharmacological or interventional strategies
- Long-term outcomes and prevention strategies

These reports contribute to improving clinical decision-making and patient care.

**Manuscript Submission**
Authors are requested to submit their manuscript by using Online Manuscript Submission Portal: https://www.casereportsincardiology.org/submit.html (or) also invited to submit through the Journal E-mail Id: editor@casereportsincardiology.org.