## **Beat SCAD**

Beat SCAD was created by SCAD survivors who met on social media while trying to find support and information about SCAD. They helped initiate the UK research and Beat SCAD works closely with research team.

Beat SCAD's vision is a world that understands SCAD, where those affected are quickly and accurately diagnosed and never feel alone.

#### Beat SCAD's mission is to:

- ☐ raise awareness of SCAD among health professionals, as well as SCAD patients, their family and friends
- provide support for SCAD patients, family and friends
- raise funds for research into SCAD

Beat SCAD believes it's important that first responders, paramedics, midwives, cardiac rehab nurses, GPs, cardiologists and other healthcare professionals are aware of SCAD diagnosis and treatment, so fit, healthy people with cardiac symptoms receive the best treatment without delay.

Beat SCAD is run entirely by volunteers and is dependent on the generosity of our supporters to continue pushing forward with our mission.



### **Further information**

#### **Beat SCAD**

beatscad.org.uk | contactus@beatscad.org.uk

#### **SCAD** research & management

Leicester Biomedical Research Centre scad.lcbru.le.ac.uk

European Society of Cardiology (ESC) SCAD Position Paper bit.ly/2FkRKmJ

List of research papers beatscad.org.uk/ research-publications

Physical activity & exercise considerations for SCAD and FMD patients (European Heart Journal) tinyurl.com/2xbnjbf4 & tinyurl.com/58ubwvu4

PCR-FAPCI Textbook Percutaneous Interventional Cardiovascular Medicine (chapter on SCAD) tinyurl.com/vepc6n33 & tinyurl.com/2kxw2w8p

ESC Guidelines for the management of ACS in patients presenting without persistent ST-segment elevation tinyurl.com/4ua723uh

#### Facebook groups

SCAD - UK & Ireland Survivors bit.ly/1Mizg9a

SCAD Family and Friends Support Group bit.ly/1TMQDwc

**BHF** tinyurl.com/mtwdyd3c









beatscaduk @beatscaduk bit.ly/1TXhiLV beatscad

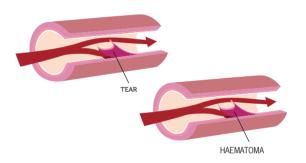
## Other leaflets in this series:

- What is SCAD?
- Diagnosed with SCAD?
- Aftercare for SCAD patients
- Pregnancy-related SCAD case studies

Download pdfs from beatscad.org.uk/ downloads or request printed leaflets from our shop (beatscad.org.uk/shop).

# SCAD for healthcare professionals

# **Spontaneous Coronary Artery Dissection**



## **SCAD** is underdiagnosed due to lack of awareness

- > Patients fail to act on their symptoms
- Medics misdiagnose or diagnose late

THIS MUST CHANGE - YOU CAN HELP



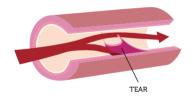
#### What is SCAD?

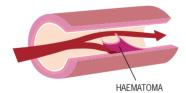
Spontaneous Coronary Artery Dissection (SCAD) is an uncommon heart condition that cannot be predicted or prevented – yet.

A false lumen develops in a coronary artery which extends, compressing the true lumen, resulting in a blockage or narrowing that prevents normal blood flow. This can cause heart attack, heart failure or cardiac arrest and can be fatal.

The cause of false lumen formation is unclear but there are currently two theories for the mechanism:

- 'Inside-out': a tear develops in the artery wall forming a dissection flap that interferes with blood supply.
- Outside-in': micro-vessels within the artery wall haemorrhage, creating an intramural haematoma, which causes vessel narrowing and sometimes ruptures to form a dissection flap.





We don't yet know what causes SCAD. Some associations have been described with:

- ☐ Female sex hormones
- ☐ Fibromuscular Dysplasia (FMD)
- Connective tissue disorders
- Pregnancy and post-partum
- Extreme emotional stress
- Fxtreme exercise

## **Symptoms of SCAD**

SCAD usually presents as Acute Coronary Syndrome (ACS) so you're looking out for 'the usual' symptoms ie some or all of:

- □ central chest pain or discomfort□ arm pain or numbness□ pain in the jaw, back or shoulders
- □ nausea and vomiting □ diaphoresis □ dyspnoea
  As these symptoms may be seen in a patient
  deemed 'low-risk' for ACS, caution is required.

## Who gets SCAD?

SCAD has been reported across a wide age range (18-84 years) but the majority of cases are in young-to middle-aged women. SCAD has until recently been considered to be a disease of pregnancy but, although it can occur in pregnancy, most SCAD patients are not pregnant.

Current data indicates:

- □ 90% women, 10% men
- Mostly aged between 44 and 53 years
- Have no or few conventional ACS risk factors
- □ 10% during or soon after pregnancy (P-SCAD) BUT 50% of all post-partum coronary events due to SCAD
- ☐ Exercise trigger more common in men

## How is SCAD diagnosed?

SCAD causes heart attacks but looks different from atherosclerosis. It is important to consider a SCAD diagnosis where a patient looks very different from a 'typical' heart attack patient. If your patient has possible cardiac symptoms, perform:

- □ ECG (may be normal) □ Troponin test (and repeat)
- □ Elevated troponin: Consider angiography; be aware that SCAD does not always have the same appearance as iatrogenic coronary artery dissection.

More research is needed to understand why fit, healthy people suddenly develop SCAD.

#### **SCAD** research

Dr David Adlam is leading the UK SCAD research project at the Leicester Cardiovascular Biomedical Research Centre. For more: scad.lcbru.le.ac.uk.

#### **SCAD** referrals

Beat SCAD has found patients benefit from referral to a SCAD specialist and encourage healthcare professionals to refer patients to SCAD experts Dr David Adlam at Glenfield Hospital or Dr Abtehale Al-Hussaini at the Chelsea and Westminster (beatscad. org.uk/clinic-referrals). They can also be contacted to discuss care of a SCAD patient (scad.lcbru.le.ac.uk/health-workers/doctors).

#### Cardiac rehab & exercise

All patients should be referred to and encouraged to participate in cardiac rehab to aid their recovery.

A paper published in the European Heart Journal, recommends moderate aerobic exercise, interval training, resistance training using lower resistance and higher repetitions. Patients are advised to be cautious when doing high-endurance aerobic training, muscle-building exercises or Yoga poses that involve extreme head and neck positions. Avoid abrupt high-intensity exercise, contact sports, extreme head positions and exercises involving the Valsalva manoeuvre.

#### Mental health

The psychological impact of SCAD can be huge and patients may experience depression or PTSD after their events. Having quick and easy access to counselling and other support to manage stress and grief can be invaluable to recovery.

## **Patient support**

Peer support aids recovery. Others with the same diagnosis can help with understanding the condition and give hope for the future. We encourage healthcare professionals to direct patients to Beat SCAD for support.