Quality of Care NL

Wide Variability in the Diagnosis of Critical Coronary Artery Disease in Patients with Unstable Angina: Data for Physicians who Referred Patients for Cardiac Catheterization

Objective

To determine the rate of diagnosis of critical coronary artery disease (CAD) in patients referred for cardiac catheterization (CC) with unstable angina, analyzed by referring physicians.

Practice Points

1. Unstable angina is unexpected chest pain in patients in whom serum troponins are not elevated. Without a diagnosis, the pain or discomfort usually occurs while resting, sleeping or with little physical exertion. It may come as a surprise, last longer than stable angina, usually unrelieved by rest or medicine, and may get worse over time.

Methods

1. Patients in the APPROACH database who had CC for acute coronary syndrome because of unstable angina from 2007-2017 were analysed.

2. Critical CAD was defined as ≥1 coronary artery with ≥70% stenosis or ≥50% stenosis of left main coronary artery.

Results

- During the past decade the number of CCs done for unstable angina decreased from 435 in 2008 to 323 in 2017, a decrease of 25.7%.

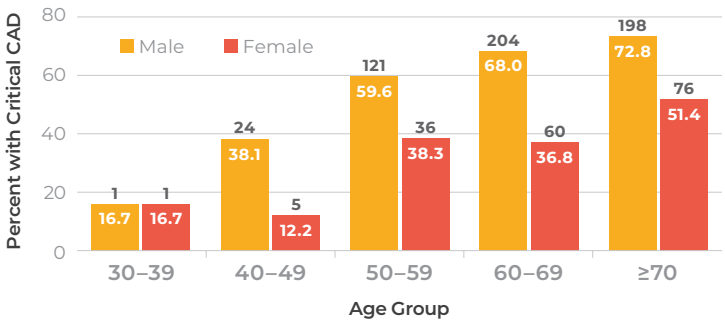

Fig. 1. Percentage of Males and Females with Unstable Angina Diagnosed as Having Critical CAD by Age (2014-2017)

- Diagnosis of critical CAD in patients referred because of unstable angina was low in all females and in males less than 60 years of age.

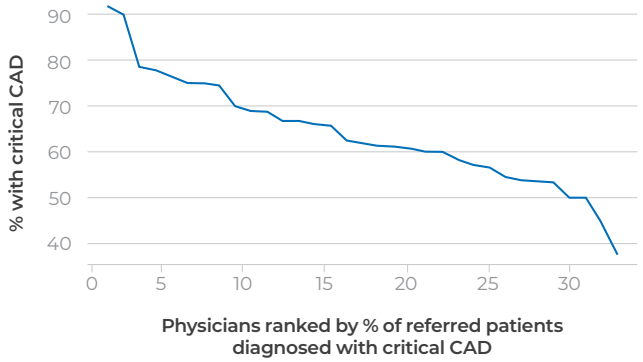

Fig. 2. Percentage of Male Patients with Unstable Angina Diagnosed with Critical CAD Ranked by Referring Physician

- The percentage of referred male patients diagnosed with critical CAD ranged from 40% to 90% when analysed by referring physician.

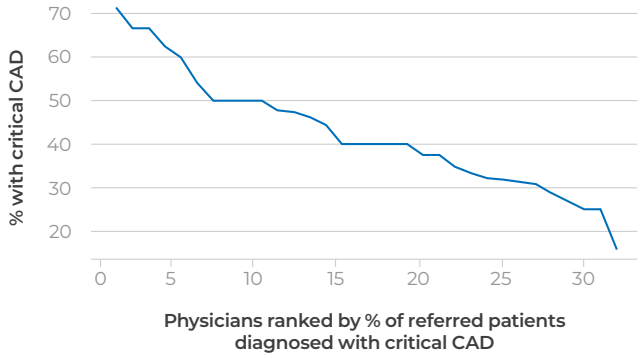

Fig. 3. Percentage of Female Patients with Unstable Angina Diagnosed with Critical CAD Ranked by Referring Physician

- The percentage of referred female patients diagnosed with critical CAD ranged from 20% to 70% when analysed by referring physician.

Conclusions

1. There is wide variability in the rate of diagnosis of critical CAD in patients with unstable angina when ranked by referring physician.

2. A careful history is necessary to determine whether the chest pain is consistent with unstable angina.

3. In patients with stable vital signs diagnosed as having unstable angina, if there is no history of CAD, a coronary CT may be indicated, and if there is a history of CAD, a nuclear myoview study may define the risk of ischemia. CC may not be necessary.