

## XIII

### Rebuttals, Rejoinders and Refutations

“The lady doth protest too much, methinks”<sup>1</sup>

Before acceptance of the postulate that has been put forward, some possible concerns need to be addressed:

The conclusions are based in large measure on negative evidence, specifically the extreme paucity of documented references to chest pain on exertion before 1768.

A number of earlier clinical descriptions of what could be interpreted as angina pectoris are extant.

Coronary heart disease can occur in the absence of traditional risk factors.

Pathological evidence of coronary arterial and heart disease antedates Heberden's first description of angina pectoris.

There are causes of angina pectoris other than coronary arteriosclerosis, notably aortic valve stenosis and syphilitic narrowing of the coronary ostia.

#### Negative Evidence

Negative evidence can have great significance on occasion and in widely differing circumstances. A striking example from the world of literature is to be found in Dostoyevsky's epic, *Crime and punishment* (1866). Raskolnikov, the student who murdered the old pawnbroker and her sister, committed the crime undetected and subsequently covered his tracks successfully. The suspicions of the St Petersburg police were aroused only because he was the one client of the murdered pawnbroker who did *not* reclaim the pledges that he had placed with her in pawn, an omission that led to his detection, conviction and exile to Siberia. As an example in real life, two Soviet physicists published a communication in *The Physical Review*, in June 1940, reporting that they had observed occasional spontaneous nuclear fission in samples of uranium. There was a complete lack of any American response to their publication and from 1940 onwards Russian scientists became aware of a sudden dearth of scientific publications by prominent American mathematicians, chemists, metallurgists and physicists. These negative observations convinced Soviet physicists, and secondarily the government of the USSR, that a large-scale secret atomic bomb project was underway in the United States.<sup>2</sup>

<sup>1</sup> William Shakespeare, *Hamlet*, III.ii.

<sup>2</sup> Richard Rhodes, *The making of the atomic bomb*, New York, Simon and Schuster, 1986, p. 327.