

## **Sex and the heart**

This commentary does not address gender. It concerns questions patients would like answered about possible adverse effects of sexual intercourse (SI). It particularly addresses sexual activity amongst those with heart disease, or those who are middle-aged or older who may be at risk of having heart disease.

### **Sex as a stressor**

The effects of SI are similar to those of other forms of exercise and emotion. SI increases the heart rate; it raises the systolic blood pressure; it increases the rate of blood circulation which increases the amount of blood pumped by the heart with each heart beat. In other words, it significantly increases the work-load on the heart. The work-load is similar to ascending stairs. In the unfit or ill-prepared, it may induce chest pain (angina) or shortness of breath. In some there may be many flights of stairs to climb; for others there may be very few steps before gratification is achieved. One must remember that a willing partner is also involved, usually with similar physiological effects. Thus we have, usually, two individuals exposed to a similar stressor but with varying degrees of response to that stressor. Thus, SI can be viewed as equivalent to exercise of a degree to which an individual may be unaccustomed. With such levels of activity over several minutes, it has been calculated that, during and immediately after SI, the chances of a heart attack or sudden death are doubled. That sounds very serious. What are the absolute risks? During one hour of adult life the chances of heart attack or sudden death during that hour is one in a million. Double that (as with SI or other significant effort) and one has one chance in half a million.

These figures apply to a 'healthy' population; that means those people who do not have known heart disease. In those with heart disease the risk is greater but probably not much greater. Protection is offered by the symptoms of chest pain, breathlessness or excess palpitation. These

symptoms are warnings to slow down, pause or stop. An understanding partner may greatly help. If symptoms are frequent or severe, abandonment of SI is common. The symptoms are protective; they indicate that the heart's load is more than it can comfortably handle. The process is not dissimilar to a symptom-limited stress test on a treadmill or cycle ergometer. Patients should inform the GP or cardiologist if significant symptoms develop with SI.

While breathlessness or palpitations may not foretell trouble, anginal pain needs careful assessment and management with medication or revascularisation (coronary artery bypass graft surgery or angioplasty with stent insertion).

### **What to do: Discussion**

Many people prefer to abandon SI rather than discuss symptoms and fears with their partner and doctor. Some become impotent or frigid, often associated with anxiety and depression. These are reasonable responses to a recent heart attack or to a diagnosis of heart disease. However, the potential threat can be addressed and overcome.

It is usually best to be open about one's anxiety and potential unhappiness. This applies first to one's partner, irrespective of gender. If unaware of a partner's concerns, it is difficult to be of help. One hears of suspicions of developing infidelity or loss of loving of the partner. A supportive partner is critical for recovery of previously successful sexual function. Also, the partner may be even more concerned about risk and should discuss openly fears or apprehensions with the patient. Many doctors are unaware of the concerns of patients and partners, because they are not told or not asked. Further, the doctor may be more concerned about other matters affecting the patient than to ask about the patient's SI. It is best, as a rule, for the partner to be present when consulting the doctor and seeking to discuss problems related to SI. This also means that the couple should have discussed the problem beforehand. The patient, simply through openness, should have recruited the two most supportive and understanding people to face the problem of impaired SI.

### **What to do: Medication**

If one follows the view that SI is a stressor for the heart, one needs to consider whether medication could be effective in removing an individual's concerns and symptoms. The medication may be

directed to lowering blood pressure, through any of many effective drugs (provided they are taken on a regular basis). The daily dose may need to be increased, but only on medical advice and prescription. A change of medication may also be more effective. Some drugs used to lower blood pressure also slow the heart rate, further reducing the heart's workload (beta blocking drugs can have this effect). If one has impaired pumping capacity of the heart, this can be reduced by restricting salt and fluid intake or by regularly taking a long-acting diuretic on a daily basis. The above possible changes to medication (again, only with individual medical advice and prescription) may well remove cardiac symptoms. It may not be enough to overcome impotence and fear (with anxiety and depression). The anxiety and depression may be reduced by understanding and support, but impotence may persist or appear. Again, this comes back to the doctor being informed of the impotence. Failure to achieve or maintain erection is common in older men with known heart disease. Recent drug treatments for this condition include sildenafil (Viagra) and similar acting drugs. Caution is required in their use because they can interact with other medications leading to a fall in blood pressure and collapse. Again, we come back to discussion, careful prescribing and advice from the doctor.

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