

Narrowed coronary vessels: stent or bypass?

Narrowing in several of your coronary vessels and/or your left coronary artery has been diagnosed and you have decided to have surgery. Use this chart in order to decide, together with your doctor, whether the blood vessels should be kept open with stents or surgically bypassed (circumvented). Reliable studies have compared the two procedures:

	Insertion of stents	Bypass surgery
What does the treatment involve?	A thin tube (catheter) is inserted via an incision into the groin or wrist and threaded to the heart. The narrowed vessel is widened with a balloon and a wire mesh tube, a stent, is then inserted. After insertion of the stents you are on permanent medication.	After separating the breast bone to create an opening, narrowed blood vessels are bypassed during open-heart surgery. Tissue taken from the patient's body is used for this. In most cases a heart-lung machine is utilised. After surgery you are on permanent medication.
How long will it take to recover from the treatment?	After the surgery you are normally monitored overnight. Most patients can resume their normal lives just a few days after the procedure.	It takes several weeks to fully recover. This is followed by cardiac rehabilitation.
What complications can occur?	Around 5 in 100 patients experience minor complications like bleeding after the cath test. Severe complications occur in around 1 in 100.	1 in 100 patients have a stroke caused by surgery. There may be bleeding, infection, pain and problems with wound healing. Some of these side effects can be severe. 30 days after surgery around 97 in 100 patients are still alive.
What is the probability that the symptoms will be relieved?	In around 80 in 100 patients stents provide permanent relief. In around 20 in 100 renewed surgery is required within 4 years (stent or bypass) because the stents have become blocked or new narrowing has occurred.	In around 94 in 100 patients the bypass surgery provides permanent symptom relief. In around 6 in 100 renewed surgery is necessary within 4 years because new narrowing occurred.
Does the treatment reduce the risk of a heart attack?*	No. Around 9 in 100 patients have a heart attack within 4 years caused by the underlying disease.	Around 5 in 100 patients have a heart attack within 4 years. This means, compared to stents, surgery prevented a heart attack in 4 in 100 patients.
Will the treatment prolong my life?	No. Around 10 in 100 patients die in the first 4 years after surgery as a consequence of the underlying disease.	Around 7 in 100 patients die in the first 4 days after surgery. This means, compared to stents, surgery prevented 3 in 100 from dying. Under certain circumstances surgery does not offer any benefits, for instance when only one blood vessel is affected.
Will the treatment impede my daily life?	For optimum treatment you must regularly take your medication and go for your medical check-ups.	After successful rehabilitation, to ensure optimum treatment you must regularly take your medication and go for your medical check-ups.

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