

## WHAT IS A POLYP AND WHY ARE THEY IMPORTANT ?

A polyp is a fleshy growth on the inside of the bowel. Some have a stalk and look mushroom shaped others are more flat like a fried egg. There are different kinds of polyps but the reason they are important is because certain types of polyps can be pre-cancerous.

## HOW COMMON ARE POLYPS ?

About one in four people will have a polyp at some time in their life. Polyps tend to be slightly more common in men than women. They are rather unusual below the age of 40 and seem to occur most often in people over the age of 60.

## WHAT SORTS OF POLYPS ARE THERE ?

Some polyps are just an overgrowth of normal tissue but one group are actually benign tumours of the lining of the colon. These polyps are called adenomas and it is this group that can go on to become cancers.

## WHY DO ADENOMA POLYPS DEVELOP ?

A normal cell will only grow and divide into two new cells under the strict control of the body – for example when a wound has to heal. However, damaged cells can grow out of control. Our bodies are under constant attack from the world around us. In the case of colon polyps we know that some of the compounds contained in red meat can damage the cells of the colon. The control of each cell is managed by the DNA which resides in the cell. If this DNA is damaged then the control mechanism can go wrong. This DNA damage referred to as gene mutation can result in uncontrolled growth and replication of the cell leading to the formation of a tumour (polyp). If the polyp is left in the bowel then further DNA damage can result in a cell that is able to grow into other body's tissues. At this point the cells have become cancerous.

## DO ALL ADENOMA POLYPS BECOME CANCER?

About 1 in 10 will turn into cancer, the rest either remain as polyps and some may even regress. It is thought that all malignancies of the bowel begin as benign polyps; so by removing benign polyps we can help to prevent the development of the ones that may become a cancer. There is no way of knowing which adenomas will become cancers. However, the larger the polyp or the greater the number of polyps there are in the colon, the greater the risk.

## DO POLYPS CAUSE SYMPTOMS ?

Usually polyps do not cause symptoms, and most people will never know if they have them. Polyps are often discovered at colonoscopy which may be done because there are bowel symptoms. Polyps closer to the anus may present with bright red bleeding. Sometimes polyps produce an excess of mucus, which is noticed on the stool when opening the bowel. Very occasionally a polyp can grow so large as to cause a blockage of the bowel but unless this occurs polyps do not cause pain.

## HOW ARE POLYPS DIAGNOSED ?

Polyps can be detected either by colonoscopy or by a special CT scan. However, if the polyps are to be removed only a colonoscopy will allow this. In the UK all 55 year olds are invited to have a flexible sigmoidoscopy. This uses a colonoscope to look in the bowel but only looks into the lower half of the colon. This will pick up a good proportion but not all polyps in the bowel. This is a cost effective screening investigation that requires only an enema to clear the bowel and does not require sedation. People between the age of 60 and 75 are invited to have their stool tested for blood every two years. If the test is positive then they will be offered a colonoscopy as a high proportion will have polyps and a few will have a cancer.

## HOW ARE POLYPS TREATED ?

There are a variety of different techniques to remove polyps but most consist of passing a wire through the colonoscope and looping the wire around the polyp - like a lasso - to remove it. This procedure is quite painless and only one examination is usually needed to clear the bowel of polyps. Occasionally, there may be too many polyps for all of them to be removed safely and the procedure may need to be repeated.

## WHAT HAPPENS AFTER THE POLYP HAS BEEN REMOVED?

Once they have been removed they can be sent to the laboratory for microscopic analysis. This will show whether or not the polyp has been completely removed, whether it has the potential to develop into cancer (is an adenoma) or indeed is a cancer.

## ONCE A POLYP HAS BEEN REMOVED WILL I NEED ANY FURTHER CHECKS ?

If the polyp was an adenoma then you will be put on a polyp surveillance programme. Depending upon the number and size of polyps you could be put on an 18 month to 5 year recall. For colonoscopy. Most patients will be on 5 year recall.