



SKIN CARE WEST

MEDICAL + SURGICAL DERMATOLOGY

BASAL CELL CANCER TREATMENT

Basal cell cancer is the most common type of skin cancer, and the most common cancer in humans overall. About 1 in 8 Canadians will develop one at some point in their lifetime. Although basal cell cancer rarely spreads from the skin to other body areas, early diagnosis and treatment are still important. Once established, these cancers gradually increase in size and cause symptoms such as itch, pain, and bleeding. In some body locations they can be associated with significant negative social or functional consequences. For example, an unsightly basal cell cancer on your nose that bleeds easily when touched, can really complicate life on a day-to-day basis.

Ideal basal cell cancer treatment would be convenient, remove the tumour with no risk of it coming back, and leave skin appearing normal. Unfortunately, no currently available treatment is perfect. All of them involve some risk of recurrence, and many will leave a scar. Convenience varies based on cost, need for travel, and lifestyle preferences. For any given basal cell cancer there may be multiple treatment options. Choosing the right one is based on:

- 1) **Tumour features** such as subtype, size and body location, and whether it is new or recurrent. *Nodular and superficial basal cell cancer* are low risk subtypes, meaning they are easy to treat. They can often be cured with nonsurgical treatments, especially when small. High risk subtypes, often referred to as *infiltrative basal cell cancer*, are more difficult to treat, and their risk of recurrence is higher. Surgery is usually the best option.
- 2) **Patient factors** including age, other health conditions, and personal preference with respect to cure rate, convenience and cosmetic outcome. Depending on your circumstances, you may prefer an option that has less impact on your lifestyle, or less risk of scarring, over one that has a higher cure rate. After all, if a basal cell carcinoma recurs, you can just treat it again.

In basal cell cancer **cure rate** only refers to the probability of recurrence. A 90% cure rate means that there is a 10% chance the tumour will come back *at the same location*. Cure rate is often expressed as an overall average, but will vary for a specific tumour based on its features. Some treatments may have a high cure rate for certain subtypes of basal cell cancer, but a low cure rate for others. Some treatments have better cure rates in certain anatomic locations.

SIMPLE OBSERVATION

A diagnosis of basal cell cancer on a skin biopsy does not mean that you *must* go on to further treatment. Very elderly individuals, or those with significant health conditions and a shortened life expectancy, may choose to simply observe the tumour and treat only if it becomes symptomatic. Some low-risk basal cell cancers, particularly the nodular variant, may not recur despite incomplete removal. The body's immune system can often clear the remaining tumour when only a small portion is left behind. In that context, it is reasonable to observe, and then treat if the tumour comes back.

IMIQUIMOD AND PDT

These two treatments are the main alternatives to surgery for low-risk basal cell cancer. Cure rate varies from 70-90% depending on tumour subtype, location and size. Outcomes with imiquimod and PDT are comparable. Both treatments can remove a basal cell with little to no scar except for what was left behind from prior biopsy. Due to their cost, these treatments are generally limited to tumours on cosmetically sensitive areas of skin.

Imiquimod is a prescription cream that stimulates the immune system. It is applied on the tumour and a small area of surrounding skin. The main advantage of imiquimod is that you apply it yourself at home. Disadvantages are that it takes 6-12 weeks to work, and the area where it is being applied can become quite inflamed (red, swollen,

tender) during treatment. Cost ranges from around \$250-\$550, depending on the amount of the cream required, and whether you use a generic or brand name product.

PDT stands for 'photodynamic therapy'. It relies on a prescription cream called METVIX. The cream is applied at the clinic in the morning and then covered with a dressing. Later you come back to the clinic to go under a special light, which takes 7-10 minutes. Some patients will stay and do a second session under the light in 1-2 hours. The process is usually repeated one week later. The advantage of PDT is that it's completed within a week. Disadvantage is the need to travel back-and-forth to the clinic on treatment days. Cost varies from about \$650-\$850.

ELECTRODESICCATION AND CURETTAGE (EDC)

EDC is a minimally invasive surgical procedure. When used for low-risk basal cell cancer it has a cure rate of around 90%. It involves 3 steps. First, a portion of the tumour is shaved off with a thin flexible blade and sent for analysis. The rest of the tumour is then scraped off the skin with a special curved blade. Finally, a hand-held pencil like tool is used to deliver an electric current to the base of the tumour. This stops bleeding and triggers a mild inflammatory response, which clears any remaining cancer. Appearance immediately after the procedure is like a very deep abrasion.

EDC is quick to perform so multiple tumours can be treated in a single session. There are also no sutures required, and no activity or bathing limitations. The disadvantage of EDC is that the wounds left behind tend to heal slowly. The result, which can take up to a year, is a pale scar about the size and shape of the original tumour. Use of EDC is mostly limited to the torso and extremities, since in the cosmetic outcome in those areas is often as good or better than the main alternative, which is surgical excision.

SURGERY

Standard surgical excision of basal cell cancer can be performed by a wide range of providers. First, tumour borders are identified using either direct vision or a small hand-held microscope. Then, the tumour and a margin of normal surrounding skin are cut out. Finally, the skin defect is repaired using sutures. Surgery for most low-risk tumours can be performed in a community clinic setting. Tumours in cosmetically sensitive areas, and those requiring reconstruction with a flap or graft after removal, are usually managed by plastic surgeons.

Mohs is a specialized form of surgery during which thin layers of cancer-containing skin are removed and examined until only cancer-free tissue remains. Mohs is performed in dedicated facilities by dermatologists and plastic surgeons who have done additional training in the technique. Criteria to qualify for Mohs are very strict due to its cost and the limited number of facilities where it is available. Mohs is only indicated for recurrent or high-risk variants of basal cell cancer in complex anatomic areas such as the nose, lips, and eyelids.

Surgery is considered the 'gold standard' for basal cell cancer treatment since it is associated with the highest cure rates. They are around 95% for standard surgery and can be as high as 98% for Mohs. In B.C. Mohs is currently only available in two locations, both of which are in Vancouver.

RADIOTHERAPY

Curative radiotherapy is an alternative to surgery for patients who are poor surgical candidates, either due to age, other medical conditions, or prior surgery in the same area. Cure rates vary depending on treatment protocol and can approach those for standard surgery. Multiple treatment sessions are usually required, spread out over days to weeks. The main disadvantage is the need to travel to a specialized centre for treatment. On Vancouver Island radiotherapy is currently only available at the Royal Jubilee Hospital in Victoria.

OTHER

The treatments above are generally recognized as being the most safe and effective. There are other evidence based techniques that we have not covered, since they have potential risks without clear advantages. There are also many online claims regarding various salves and creams that can cure skin cancer. These are often presented with testimonials about their high effectiveness and limited side effects. We recommend against these alternative treatments since their use can lead to deeply invasive tumours.