



# A Blow to the Big Toe

Howard A. Winston, MD, CCFP, FCFP, Dip. Sport Med. (CASM)

Chantel is a 45-year-old mom, who was running her regular jogging route and felt a pain in her right big toe when she came down off of a curb. She didn't think much of it and she continued her run.

Later that day, she had a social event to go to and when she put on her high heels, she felt pressure near her right big toe. It was then that she noticed that her toe was swollen. Later that evening, as Murphy's Law would dictate, Chantel stubbed (hyperflexed) this toe on the carpet, on the way to the washroom. After she stubbed her right big toe, she had intense, acute pain and she began limping. Chantel comes to see you because of the swelling and the pain in her right big toe. Chantel is concerned that she has fractured her toe.

The first thing that you notice about Chantel is the way that she limps into your office. On

inspection, the right big toe is swollen and bruised. She is particularly tender over her right first metatarsophalangeal (MTP) joint. She feels a lot of pain when she flexes her toe downward and when she extends it upward.

Chantel is an avid runner, running 30 km to 40 km per week and is light for her height (her height is 163 cm and she weighs 52 kg). As a result, because of the possibility of underlying Osteoporosis, you order an X-ray.

When Chantel returns to you with her X-ray, you don't see

any fractures. You feel that she has suffered a soft tissue injury and you explain to her that she needs to:

- see a physical therapist,
- ice her toe three times per day for 10 minutes to 15 minutes at a time,
- modify her activities and
- use an oral non-steroidal anti-inflammatory drug (NSAID) for 10 days.

You instruct her to make a follow-up appointment in three weeks time.

At this time, Chantel tells you that she has a 10 km run competition in four weeks time that she wants to compete in.

*On inspection, Chantel's right big toe is swollen and bruised and it is particularly tender over her right first MTP joint. She feels a lot of pain when she flexes her toe downward and when she extends it upward.*



She wants to know if her toe will be healed in time for the race. You explain to her that you will do your best.

Two weeks after her first appointment, Chantel tells you that she is doing well with the therapy, but that she still has difficulty walking, let alone running. You decide to send her to a sports medicine physician.

The sports medicine specialist recommends Sonophoresis (therapeutic ultrasounding of a topical NSAID into the joint soft tissue) for two weeks. He also recommends that Chantel properly tape the joint for better support and protection of the soft tissue.

Chantel calls you the next day to tell you how much more comfortable it is to have the joint taped. She says she is no

longer limping and that she has even tried running. She feels no significant pain when her toe is taped, so she asks you if she can continue her training for the 10 km race she has in two weeks.

You explain to Chantel that she must use pain as her guide, but that it is better not to run, than to run. However, despite your statement, once Chantel hears that she can use pain as her guide, she begins to run again.

Chantel returns two weeks later to the Sports Medicine physician for a follow-up. She tells him that when her MTP joint is taped, there is virtually no pain to report. She also states that she was able to compete, had little pain and finished strong at the end of the race, with a time of 42 minutes.

He examines the joint, only to find that there is still a moderate degree of discomfort with flexion/extension motions, but not with normal motor function. He encourages her to get further treatment, but to adhere more closely to the instruction of modified activities.

She returns to your office three weeks later. Having listened to all of the recommendations from the sports medicine specialist, she is near 100% improved.

You tell her that as she gets back to running, she should continue taping her MTP joint for three weeks. After this time, she can assess how she feels while running without taping.

She thanks you very much for your thorough care. As she leaves, she says to you: "Now I will know how to handle a 'blow to the big toe!'"

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*The sports medicine specialist examines the joint, only to find that there is still a moderate degree of discomfort with flexion/extension motions, but not with normal motor function.*

**Dr. Winston** is an Assistant Professor, Department of Family and Community Medicine, University of Toronto and Medical Director, Centre for Health and Sports Medicine, North York, Ontario.