



CP Laserphoto

**ROOT OF THE PROBLEM** — Podiatrist Sheldon Nadal uses the Xi-Scan to evaluate bunion of patient, Irene Henry, prior to surgery by minimal incision technique.

## Xi-Scan aids podiatrists

TORONTO (CP) — Staring through the viewer of a portable X-ray machine, Dr. Sheldon Nadal gently pushes the side of his patient's foot to realign a toe bone, which he has just sawn through to correct a bunion.

But there is no need to wonder if he's applying too much pressure or not enough. Through the machine, called a fluoroscope, the knuckled bones of the foot stand out a deep forest green against a bright green background — providing a living X-ray.

Known as a Xi-Scan, the four-kilogram, low-radiation fluoroscope is part of the new equipment being used by podiatrists, who treat a host of disorders that plague the feet.

"The beauty of this is that I can use it during surgery," says Nadal, explaining that the Xi-Scan permits him to see how foot bones are aligned, correct any problems, then immediately see the results.

There is no 10-minute wait while a standard X-ray is developed, during which time bones in the foot might shift position, says Nadal, who performs the surgical procedures in his office.

Nadal has been practising podiatry for about seven years. He believes he's the only health-care practitioner in Canada to use the \$20,000 Xi-Scan, which was developed by Canadian tech-

nologists and scientists from NASA.

The Xi-Scan is used in conjunction with minimal incision surgery, which means "less pain, less chance of infection and less bleeding because of the small incision," Nadal says. "And generally, there is no need for a cast or pins or crutches.

"Most of all, there is less down time. A secretary, for instance, could be back to work in a week, while it might be six weeks or more with traditional surgery."

For surgery to correct bone disorders like hammer-toes and bunions, Nadal uses a local anesthetic, makes an incision a little more than a centimetre long, then cuts through the bone with a fine drill, called a burr. The bone is repositioned, the incision closed and taped, and the patient walks out of the office. The dressing is changed once a week for six weeks.

In the condition known as hammer-toe, the toe joint is bent upwards, causing it to rub painfully on the top of the shoe. A bunion is an enlargement of the first joint of the big toe that forces the upper part of the toe to turn inward. In severe cases, the second toe will permanently cross over top of the big toe, in the same way a person would cross their fingers.