Hiroyuki Ishii, a visiting assistant researcher at Waseda University's Atsuo Takanishi laboratory in Tokyo, gets a facial massage from the WAO-1 robot.

AP PHOTO

New robot can give facial massages

The Associated Press

With steely arms sprouting cables and wires, the WAO-1 robot looks nothing like a relaxation device.

But researchers at Waseda University in Tokyo hope the contraption will soon be deployed to hospitals and spas across the country to give therapeutic facial massages.

The WAO-1 robot, which stands for Waseda Asahi Oral Rehabilitation Robot 1, is being developed initially for patients with jaw-related medical ailments who require facial massages as part of their treatment, according to project leader Atsuo Takanishi.

The robot's arms are fitted with ceramic spheres the size of a golf ball that roll over the skin. The arms' movements are controlled by a complex set of algorithms designed to emulate massages, while six sensors at the base of the arms measure and adjust the pressure applied by the spheres, Takahashi said.

The technology is more refined than those in electric massage chairs because the facial bone structure is much more fragile than back or spine bones, he said.

Another research team member, Ken Nishimura, said the robot could be adjusted to give beauty and relaxation massages.

"This technology can be applied very widely. I'm looking forward to a time when this robot will give beauty facials at spas," Nishimura said.
The team is set to start clinical trials using the robot in November, according to Takanishi.