

Development of Joint Prosthesis

Yoshio Nakashima

Teijin Nakashima Medical Co., Ltd., Japan

E-mail: y.nakashima@teijin-nakashima.co.jp

The number of cases of bipolar hip arthroplasty and total hip arthroplasty exceeded 120,000 cases in Japan last year. The total of approximately 200,000 patients had joint replacement surgeries for one year including the number of 80,000 cases for total knee arthroplasty. Considering the increase in elderly population, the further increase in the number of artificial joint replacements is expected.

On the other hand, Japanese manufactures have approximately 20 % share in the market of artificial joint replacement and fall behind the Western manufacturers. As a Japanese manufacturer, we have promoted a variety of researches and developments in order to change the current situation. For example, we have engaged in the improvements in design suitable for the Japanese bony shape and lifestyle, the development for the material which aims to offer greater longevity of joint prosthesis, the surface treatment technique which increases biocompatibility with bones and metals, and the technology which adds the anti-infection function.

This presentation will provide mainly the current situation of the market and technology development for joint prosthesis in Japan.