CHAPTER VI

CONCLUSION

Instability after knee replacement can be minimized by having implants of various levels of constraint available. The surgeon should also have implants of various levels of constraint available during the TKA. The designs of the total knee prostheses are limited in the number sizes available. Proper implant sizing can help avoid complications and hence maximize the surgical outcomes. This finding shows that an implant component suitable for use in the Western population may not be suitable for the Thai population. It is postulated that the smaller the built and stature of the Asian-Pacific population, including the Thai population requires different component sizes. Especially, the knee joint structure of the Thai female was significantly smaller than that of the Thai male. According to our study, the female population needed various different sizes of the prostheses from their male counterpart.

There has long been a belief among the Thai and Asian-Pacific arthroplastic surgeons that the prosthetic components currently available in the market do not fulfill the requirements of the arthropometrically smaller groups. The aim of this project was to obtain arthropometric data on the distal part of the femur and the proximal part of the tibia to design the optimal components for the Thai population. Under these considerations, we believe the results of the project could provide fundamental data for the designing of knee prostheses suitable for the Thai population. These data will provide the basis for the knee prosthetic designs for most of the Asian-Pacific populations which will be the world largest market in future.