Royal Dental Implant Project

Wichit Tharanon, Pathaweek Khongkhunthian, Ratana Warrapassu
Advanced Dental Technology Center
National Science and Technology Development Agency
Ministry of Science and Technology, Thailand
wthara@yahoo.com, pathaweek@yahoo.com, ratanaw@nstda.or.th

Somchai Chaisupamongkollarp, Chaweewan Pakdethanakul
Institute of Dentistry
Ministry of Public Health, Thailand
somchai_supa@yahoo.com

Sutha Jienmaneechotchai
Bureau of Dental Health
Ministry of Public Health, Thailand
sutha.j@anamai.mail.go.th

Abstract - The purpose of this presentation is to demonstrate how we bring the results of research and development of dental implant in laboratory to clinical applications.

Royal Dental Implant project (RDIP) is multidisciplinary approach including biomedical engineering, biomaterial scientists, clinicians and health care workers. Its background began from dental implant research project which conducted by Advanced Dental Technology Center (National Science & Technology Development Agency, Ministry of Science and Technology) in 2004. This research project involved five parties (Chulalongkorn university, Mahidol university, Chiangmai university, ADTEC, and MTEC). It started from engineering design of dental implant, finite element study, making prototypes, mechanical and biological testing prior to animal experimentation and clinical trial in human. After R&D of dental implant project was completed, Ministry of Science and Technology and Ministry of Public Health has purposed “The Royal Dental Implant Project” to the government for His Majesty the King’s Eightieth Birthday Anniversary celebration. This project began in 2007. The role of Ministry of Science and Technology was to manufacture 25000 dental implants with international standard (ISO 13485 and CE 0197). The role of Ministry of Public Health was to distribute 25000 dental implants throughout the country. On 28 February 2008, His Majesty the King gave the name “Fun Yim” to the first Thai dental implant system. The Ministry of Public Health has implemented this project through The Institute of Dentistry for 10000 people since 2007.

The results of this project are 1) improvement of quality of life in people who have poor full denture and lack of opportunity to have dental implant because this project provides two dental implants for free, 2) more than 150 dentists throughout the country who work for Ministry of Public Health have educated and know how to place dental implant, 3) this project has economy impact (the budget used for this project is 134 millions B instead of 1200 millions B) and 4) following self sufficiency economy of His Majesty the King.

Remark: The full paper may be found in www.inrit2011.com or www.ijcim.th.org.