EDITORIAL

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The importance of information technology for clinical and basic researches on the field of oral and maxillofacial surgery

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Recently, with the support of science technology, the clinical and laboratory researches in the field of oral and maxillofacial surgery have been developed so fast. In negative aspects, it is more difficult to execute qualified researches without catching up with newly-developed research techniques or devices than before. Researchers who repeated experiments with similar design and similar methodology will be fallen behind.

Clinically, Korea have competitiveness in many specialities of medical services, including oral and maxillofacial surgery. in the world market. There is many advantages including competitive price with relative high quality. However, there is little competitiveness in research area.

As clinicians, funding source and ethical consideration are main barriers in the researches. To overcome these barriers, consortium among researchers interested in the similar studies. More reliable large-scale data collection or repository establishment in genetic information on epidemiologic study is one of the major advantages of consortium or group studies. Also, the establishment of network is inevitable for the improvement of research quality and international competitiveness improvement in terms of study efficiency as well as prevention of redundancy by definite role division. It is needless to say that the financial assistance and other administrative support of government on health technology should be followed.

Korea is one of the highly-ranked country related with information technology. In the worldwide, big data is hot issue[1-4]. It is important to establish network for big data, 'smart medical infrastructure.'

However, prior to this, the development of insight on the big data and biostatistics would be essential to the researches on the field of oral and maxillofacial surgery. Because big data get the limelight nowadays, more powerful statistical approach is requested.

There are still many incurable diseases in oral and maxillofacial area including oral cancer. For example, autoimmune disease such as pemphigus or pemphigoid lesions, Sjogren's disease, lichen planus, bisphosphonate related osteonecrosis of jaw bone were not cured yet. However, few researches have been performed on these important topics. More researches are mandatory to the oral and maxillofacial surgeons to suggest guideline of treatment on incurable diseases. With the help of information technology, also new approaches using big data and new methods such as microarray or next generation sequencing should be considered for the oral diseases[5-7].

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