A meticulous plan is essential to conduct implant treatment for defects caused by trauma. Since it is impossible to move the position of an established implant, a three-dimensional treatment plan based on CT diagnostic imaging is extremely important for implant treatment especially in the growth phase or combined with orthodontic treatment. Currently, dental CT used in corrective diagnosis has been applied to clinical dentistry, and high-level imaging studies have become widely practiced (Fig. 1, 2, and 3). In addition, in the case of invasion and defect involving also the alveolar bone as a result of trauma, various softwares are now available for three-dimensional diagnosis (Fig. 4 and 5) and implant planning as a support for the overall prosthetic and surgical treatment plans. The environment and work flow of the treatment procedures are introduced (Fig. 6).
AI Dental Clinic (Workflow)

Kyushu Oral Diagnostic Imaging Center
3-Dimensional Diagnosis
Implant Diagnosis (SimPlant)
Cephalo-analyser (CephaloMetrics AtoZ)
Skeletal and orthodontic diagnosis (SimPlant CMF)

Private Clinic Doctor
Trauma
Tooth Loss

Implant Treatment
The direction of implant placement, size, number
The necessity of bone preparation, volume
The operational technique, selection
The preparation of SurgiGuide

Orthodontics
Oral Surgery

Orthodontic
Simulation of the operation
Postoperative estimation

Fig. 5

Fig. 6