Background: Only limited number of patients with oral mucosa lesions can be seen during pregradual practice. Moreover, the oral mucosa diseases may change rapidly during time which has an impact on the differential diagnosis. For students' appropriate training it is necessary to see as many patients as possible and to inspect the oral mucosa lesions in all stages. Summary of work: The aim of the project was to create atlas of oral diseases for undergraduate students of Faculty of Medicine, Masaryk University, Brno, Czech Republic. Summary of results: Currently more than 400 pictures are divided into 12 chapters and 120+ sub chapters. The chapters are presented in the same order as in “Repetitorium onemocnění sliznice dutiny ústní” (authors: L. Izakovičová-Hollá, A Fassmann) – textbook of Oral mucosa diseases created by authors from our clinics. Each chapter covers one anatomical part of oral mucosa. Conclusions: The database can be updated according to the newest knowledge and scientific findings. The materials can be used for testing as a part of the written exam. Take-home message: The atlas is a useful tool to improve the knowledge of the oral mucosa diseases in undergraduate students of dental medicine. The study was supported by grant FRVS 2114.