angiogenesis, cell differentiation and microvessel density is not known in the human mucosa. Therefore, we invesigated the relationship of differentiation (Ki-67,) and angiogenesis markers (CD31, D2-40, VEGF-A) in the second molar region of oral mucosa in dentulous group with tooth marks using immunohistochemical methods compared to that of edentulous. In this result, developed vessels and lymphatic vessels were found in irregular mucosa and the development of these vessels in the oral mucosa provided specific histological information on future tumor progression.

P2-07

Utility of Implantable Cardiac Monitoring System for detecting cardiac arrhythmias in patients with unexplained syncope

(循環器内科学)
○矢崎 義直、里見 和浩、高田 康之
嘉澤脩一郎、近森大志郎

【Introduction】 Although risk of death in patients with cardiac syncope is double compared to the general population, identifying the cause of syncope is very challenging. The implantable Cardiac Monitoring (ICM), which can continuously monitor and store ECG recordings, was invented. Utility of ICM for patients with syncope has not been thoroughly investigated.

【Methods】 We conducted a prospective Multi-Centre observational study in 120 patients (mean age 68±16 years, 80 males) implanted with ICM for unexplained syncope between 2011 and 2018. We assessed the diagnostic yield and elapsed time for diagnosis of syncope.

【Results】 During the mean follow-up period of 18±19 months, causes of syncope were diagnosed in 37% of all patients. The causes of syncope were sick sinus syndrome (77%), paroxysmal atrioventricular block (7%), tachycardia (9%), and others (7%). The mean period from the first episode of syncope to ICM implantation was 30±71months (range 0-490). And the period from implantation to diagnosis was 4±5 months (range 0-20).

【Conclusions】 ICM was useful to diagnose unexplained repetitive syncope. It was a relatively long process for patients with syncope from the first episode of symptoms to ICM implantation. Early implantation of ICM should be considered in patients with undefined cause of syncope by standard diagnostic process. Further study is needed to investigate whether the strategy of initial ICM implantation would provide a more accurate diagnosis than a conventional strategy.

P2-08

Different ECG Changes of CRBBB with Time between Health Check-up Examinees and Patients with Cardiac Diseases

(循環器内科)
○嘉澤脩一郎、里見 和浩、高田 康之
矢崎 義直、近森大志郎

【Purpose】 CRBBB is benign arrhythmia, but an its association with risk for cardiovascular or total death was reported. We investigated the changes of CRBBB ECG during follow-up in healthy and diseases subjects.

【Subjects and Methods】 As a control, 80 CRBBB individuals at the health check-up (55.1±10.8 yrs, male 81.3%) and 50 patients with cardiac diseases (60±8 yrs, male 92%) were included, and the ECG changes were compared during follow up >3 years.

【Results】 At baseline, there were significant differences in PR interval, QRS width and QTc between control and patient group : 165 ±21 vs. 181±29 ms, 141±13.0 vs. 156±18 ms and 419±19 ms vs. 444±33 ms (P<0.001 for all), respectively. During the follow-up, QT and QTc prolonged in the control : 415±29 ms to 423±28 ms and 419±19 ms to 424±21 ms (P<0.01). Prolonged QRS width >10 ms during follow up was more frequent found in the patient group than the control (9.8% vs. 1.3%, P=0.016). Normalization of QRS was observed in 6.1% and 7.8% for control and patients (P=0.713).

【Conclusion】 QRS and QTc were prolonged, and widening of QRS occurred more often in the patient group. The significance of the different ECG changes during follow-up need to be determined.