Title: Veruccous carcinoma of the tracheobronchial tree – An underdiagnosed entity?

Dr. Claus 17711 Steppert klinik@steppert.de MD ¹, Mr. Joseph 17712 Alhanna joseph.alhanna@klinikum-bayreuth.de MD ¹, Mr. Juergen 17713 Schubert juergen.schubert@klinikum-bayreuth.de ², Dr. Jens 17714 Krugmann jens.krugmann@klinikum-bayreuth.de MD ² and Dr. Michael 17715 Vieth michael.vieth@klinikum-bayreuth.de MD ². ¹ Pulmonology, Med. II, Klinikum Bayreuth, Bayreuth, Germany, 95445 and ² Pathology, Klinikum Bayreuth, Bayreuth, Germany, 95445.

Body: Veruccous carcinomas are described as rare squamous cell carcinomas of the oropharynx, larynx and esophagus but surprisingly not in the tracheobronchial tree. We describe the case of a 74 years old man admitted to our hospital for increasing shortness of breath and the diagnosis of COPD exacerbation. As patient didn't improve despite antiobstructive treatment bronchoscopy was performed and showed a warty polypoid circumferential mass in the distal trachea reducing the cross sectional area by ∼70%. Histologic work up showed a highly differentiated squamous cell carcinoma with low proliferation index and only mild nuclear atypia but substantial aneuploidia in DNA cytometry. Positive in-situ hybridisation against HPV 1,6,7,16,18,31 probe eluded HPV infection. Further staging including FDG- PET CT didn't show any evidence for local or distant metastases. LASER bronchoscopy and kryoablation was performed for removal of the remaining tumor. Interestingly lung function test after recanalisation was completely normal. In repeated broncoscopy controls no evidence for recurrence could be seen for 9 months now. Endoscopically as well as histologically this tumor resembles veruccous squamous cell carcinomas found in the gastrointestinal tract. Aneupoidia in DNA cytometry proved the malignant character of the disease. So we classified it as veruccous carcinoma of the trachea though never described before and argue that papillomatous tumours of the tracheobronchial tree may be misdiagnosed as papillomas instead of veruccous carcinomas. The long history of airflow limitation and the actual diagnosis of malignant disease seems to be a sign of late malignant transformation as previously described in papillomas.