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The Department of Gastroenterology of Centro Hospitalar S. João/ WGO’s Porto Training Center has almost 10 years’ experience on Endoscopic Submucosal Dissection (ESD). We publish one of the largest western ESD series (João Santos-Antunes et al. United European Gastroenterol J. 2018; 6(5): 702-709), as well as a large series of ESD performed in an outpatient basis (João Santos-Antunes et al. United European Gastroenterol J. 2019;7(8): 1135 and Baldaque-Silva F et al. United European Gastroenterol J 2019; 7: 326–334).

As a faculty member of the WGO’s Porto Training Center, I spent three months at the end of my residence in 2015 learning this technique with Japanese experts. We now have experience in performing ESD in the esophagus, stomach, duodenum, colon, rectum and anal canal. Technically, we perform almost our procedures using a needle-type ESD knife (Dual-knife, Olympus, Tokyo), as described and learnt with Prof. Naohisa Yahagi, from Keio University, Tokyo. Whenever necessary, we also use insulated-tip knives (IT or IT-nano knives, Olympus, Tokyo). We also have experience in other procedures technically related to ESD, to treat other disorders, namely PerOral Endoscopic Myotomy (POEM) for achalasia, after training with Prof. Haruhiro Inoue at the Showa’s Hospital, in Tokyo, and Gastric-POEM for gastroparesis.

We were recently awarded with the National Gastroenterology Award due to further clinical investigation in the area of ESD. Specifically, we assessed the follow-up of our patients that did not fulfill all the criteria for curative resection after ESD in the last 5 years. We included 371 consecutive ESDs (335 epithelial, 36 submucosal lesions) performed in the esophagus (n=12), stomach (n=213), colon (n=20), rectum (n=124), anal canal (n=1) and duodenum (n=1). ESD was technically successful in 359 lesions (97%). From the 309 neoplastic epithelial lesions and 18 neoplastic submucosal tumours,
50 (43 epithelial and 7 submucosal) did not fulfil curative criteria entirely. Positive horizontal margins (n=20), positive vertical margins (n=16) and submucosal invasion >SM1 (n=14) were the main causes of non-curative ESD. The most remarkable result was that among 41 patients with non-curative ESDs (19 were operated and 22 were already followed-up by endoscopy), only 6 (1.9% of the total number of successful neoplastic ESDs) had residual neoplasia – most of these patients had in fact clinically curative resection of their lesion, despite not fulfilling all the histological criteria. Therefore, criteria not to offer invasive complementary treatment after non-curative resection should be better defined in further, larger scale studies.

Our Training Center organized in the past few years live meetings in the area of ESD, including with the presence of Japanese experts. Some of our near-future goals are to promote more meetings and continue to perform research in this area, in order to attract more trainees. Due to the cumulative number of more than 500 ESDs, the excellent outcome of our procedures, the available equipment, the specialized staff and the training and constant actualization with Japanese experts, our Center has all the conditions to be a reference Training Center on ESD in the West.

ESD team, from right to left: Dr. João Santos-Antunes, Dr. Pedro Moreira and Dr. Ana Luísa Santos (Gastroenterology senior residents), nurse Aldina Alves, Dr. João Viterbo (Anesthesiologist) and nurse Fátima Silva.