

The outbreak of Novel Coronavirus disease (COVID-19) caused a worrying delay in the diagnosis of oral cancer in north-west Italy: The Turin Metropolitan Area experience

Dear Editor,

Recently, the epidemic of Novel Coronavirus disease 2019 (COVID-19) has become a chief public health challenge for many countries around the world. In Italy, it started in January the 31st with the first 2 cases reported; on Monday the 13th of April, the total confirmed cases were 156,363 with 19,901 total deaths (www.who.int). Turin is the fourth Italian city, with roughly 862,000 inhabitants, and the capital of Piedmont region, one of the most affected by COVID-19.

In Turin, the major restrictive measure to the population, due to the COVID-19, began on Monday March the 9th, with slighter advertising already started on Sunday February the 23rd. Those, together with an initial anxiety since the beginning of February triggered the lock down of approximately the 95% of the total dental care services in all the territory, both private and public.

The Inter-departmental Research Center (CIR) Dental School is a research centre of the University of Turin; its healthcare area is equipped with 71 clinical dental chairs, distributed in 10 different out-patient units. The CIR-Dental School (one of the biggest public dental service in Italy) provided dental care (including oral surgery and medicine) to around 75,000 patients last year (approximately 350 quotidian, if considering 250 days of normal activity), and is home to ~200 staff unit and ~345 students. From Friday the 21st of February, its clinical activity started to be reduced, with only incoming urgent patients under the premise of suitable protection measures.

Oral squamous cell carcinoma (OSCC) is a common disorder, leading to serious global health problems (Bray et al., 2018; D'Cruz, Vaish, & Dhar, 2018). For instance, an increase in diagnosis is expected within 2,035 (+65%), and more worryingly, the cases currently diagnosed in elderly patients (≥ 65 years old) are expected to double (about +104%) in the next 20 years (Ferlay et al., 2015).

The oral medicine unit of the CIR-Dental School offered oral care to around 7,500 patients last year, being the main referral centre for the oral cancer diagnosis in the Turin Metropolitan Area; in 2019, we identified 40 cases of OSCC (approximately 0.16 daily). The last available register for oral cancer in the Turin Metropolitan Area (consisting of 2,247,780 inhabitants at 2011 census) reported an average annual incidence of 115 cases (considering the period from 2008 to 2012) (www.cpo.it); the diagnosis performed in our

centre in that period accounted for almost the 30% of the total. In the last 45 working days (the time in which we have usually expected approximately 7 new cancer cases), we diagnosed only one case of OSCC in an 82-year-old female patient, attending our department referred by her medical doctor for persistent left buccal mucosa pain. No other case has been referred by general dentists in that period. The reasons for this situation are not totally unblemished.

In the last months, many governments and different trade associations issued exigent statement urging dentists to postpone less critical procedures, trying to give guidance to help distinguish dental emergencies and urgent situations from less urgent care. For example, the biopsy of abnormal tissues has been reported as urgent (www.ada.org), without indicating that the conventional oral examination is still one of the most safety procedures to rule out the possibility of oral premalignant or malignant diseases.

Italian decrees have restricted people's movements from a municipality to another, permitted only in case of (a) well-grounded work-related reasons, (b) absolute urgency or (c) health-related reasons. Elderly subjects presented the greatest discomfort because of those restrictions.

People generally suppose that urgent problems in the oral cavity are linked to acute dental pain (Macek, Cohen, Reid, & Manski, 2004), but it is also possible that the fear of infection for coronavirus could be another reason why patients were reluctant to income to hospital facilities.

Early OSCCs usually tend to have a quite favourable course (Caldeira, Soto, de Aguiar, & Martins, 2019). Otherwise, as previously reported, in our population OSCC cases with a longer diagnostic delay, showing a worse histological grading, larger size and neck involvement, presented a worse prognosis (Arduino et al., 2008).

If these data will be confirmed in the next months (in which we should expect a still present even if less restrictive behavioural social measures) and also in other areas, it would be possible that the diagnostic delay in the oral oncological field will rise exponentially, with an increase in the mortality rates especially in the elderly population.

Differentiated pathways and valid screenings for Covid-19, implemented by new and faster tests, could be the tools to defeat or at



least mitigate the reported fright in the population. Moreover, it will be requested a rapid and a more comprehensive reorganization of our usual national hospital dental paths.

KEYWORDS

COVID-19, delay, diagnosis, OSCC

CONFLICT OF INTEREST

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

AUTHOR CONTRIBUTIONS

Paolo G. Arduino: Conceptualization; Methodology; Supervision; Validation. **Davide Conrotto:** Conceptualization; Data curation; Supervision; Validation. **Roberto Broccoletti:** Conceptualization; Formal analysis; Supervision.

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