Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID-19. The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information website.

The case described contributes to increase the awareness of extrathoracic hypoxemia causes such as Abernethy malformation when facing a chronic hypoxemia in children and once cardiac and primary pulmonary causes have been excluded. A prompt diagnosis and proper management may prevent the development of serious complications.

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The authors have no financial relationship to disclose.

Conflict of interest

The authors have no conflicts of interest to disclose.

Appendix A. Supplementary data

Supplementary data associated with this article can be found, in the online version, at doi:10.1016/j.arbres.2021.02.005.

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COVID-19 and smoking: An opportunity to quit☆

Tabaco y coronavirus: una oportunidad para dejar de fumar

To the Editor:

The start of 2020 heralded high expectations for smoking cessation in Spain, due to the planned funding of 2 of the 3 first-line drugs for quitting smoking (varenicline and bupropion) by the Social Security regime. However, the arrival in March 2020 of the SARS-CoV-2 pandemic (Covid-19), with home confinement and the ensuing anxiety and stress, changed the landscape. Although logically we might think that the Covid-19 crisis would not be the ideal time to quit smoking, data are emerging that suggest the opposite.

We analyzed abstinence during confinement in patients followed in our smoking unit who had started an attempt to quit smoking between January 1, 2020, and the declaration of the state of alarm on March 13. There were 100 patients, 46% men, with a mean age of 59 ± 9 years; 35% had high blood pressure, 8% had diabetes, and 26% had dyslipidemia. Respiratory history included chronic obstructive pulmonary disease (COPD) in 42% and obstructive sleep apnea (OSA) in 20%. All were prescribed treatment with varenicline. Smoking habits were as follows: 8 ± 2 points on the visual analogue motivational scale, 6 ± 2 points on the Fagerström test, and 16 ± 12 ppm on co-oximetry. Patients started smoking, on average, at 17 ± 5 years, and average consumption was 18 ± 8 cigarettes a day with a cumulative index of 43 ± 18 pack-years. Follow-up in our unit comprises about 6–7 visits until 1 year of abstinence is completed, the first visit taking place 2–4 weeks after quit date. With the arrival of confinement and the suspension of face-to-face visits, planned follow-up visits were made by telephone by the treating pulmonologist who resolved questions and prescribed medication electronically. Patients were asked about abstinence at 1, 3, and 6 months, including during the confinement period (March 14 to June 21, 2020). Over half (56%) of patients confirmed abstinence during confinement. If we analyze abstinence by months, we see a rate of 67% abstinence at 1 month, 52% at 3 months, and 47% at 6 months. Of those who did not stop smoking, 12% reported reducing the number of cigarettes consumed by more than half.

Previous studies have shown a 25%–35% success rate in smoking cessation in the first 6 months and up to the first year through the combination of pharmacological treatment, psychological support,

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and specialized supervision[1,2]. We believe that several factors contributed to the success achieved in our cases, despite confinement and its consequences.

First, smoking has been shown to be a risk factor for severe Covid-19, doubling the possibility of serious disease progression[3–7]. Increased concern for health and a greater perception of the risk of getting ill is associated with an increased motivation to quit smoking and more successful attempts[8]. We could compare this vulnerability with hospitalization, a situation previously described as an opportunity to quit smoking[9]. All this contrasts with the fact that social distancing, confinement, and its social and economic consequences, including unemployment, increase stress and anxiety, are factors that can contribute to the increase of tobacco consumption and relapses[10]. A survey conducted in the U.S. among cigar smokers during the pandemic showed that, while 40% reported smoking even more in the first few days, 76% had a higher perception of the risk of Covid-19 complications. Seventy percent showed a willingness to quit in the next 6 months, and up to 46% stated that they had requested help for their attempt[11]. Another study carried out during confinement[12] showed no differences in the percentage of smokers who increased the number of cigarettes smoked daily and the percentage that reduced their consumption. Those who reported smoking more did so because of stress or anxiety, since they really wanted to quit, but found it difficult to access medication and psychological support. Another survey in England of smokers and electronic cigarette users showed that only 1 in 10 had attempted to quit during the months of April and May 2020[13]. In the Netherlands, similar work in smokers motivated to quit showed an increase in this motivation due to the coronavirus[14].

Another potential contributing factor is that confinement and exposure to secondhand tobacco smoke pose a greater risk to children and cohabitants. Confinement with children, often in small apartments without garden areas, can increase smokers' motivation to quit and protect passive smokers[15,16].

Second, during confinement and the state of alarm it was more difficult to buy cigarettes. Several studies have shown that difficulty in accessing tobacco products is associated with a greater likelihood of quitting[17]. In Spain and other European countries, small shops selling tobacco, newspapers, postage stamps, etc. were considered essential services and remained open to the public, but the bars, restaurants, gas stations and other places where cigarettes are usually sold were closed. In Spain, moreover, tobacco is also not sold via the Internet. Pulakka et al.[18] showed that a distance of more than 500 m from home to the nearest tobacco outlet was associated with a 16% increase in the possibility of quitting.

Third, quitting smoking is a lifestyle change. For many quitters in the action phase, social gatherings, lunches, dinners, and drinks with friends and family are an added obstacle to quitting smoking and, in fact, are avoided by many[19]. Staying at home could help. Weddings, christenings, and communions, feared social gatherings for a smoker who is the process of quitting, were also suspended.

And finally, pharmacological treatment. In Spain, 3 effective smoking cessation treatments have been authorized: varenicline, nicotine replacement therapy (NRT), and bupropion[20]. Since January 1, 2020, 2 of these 3 treatments are now funded by our social security system. Thanks to this, at the beginning of 2020, a time when many smokers decide to give up for their New Year's resolution, more smokers would have taken the decision to quit. The state of alarm was declared on Friday, March 13, 2020, when many smokers were already making a serious attempt to quit smoking.

The most important bias that might affect our results is that abstinence was declared by patients because, given the impossibility of conducting a face-to-face visit, we could not test abstinence objectively using co-oximetry.

In summary, our results indicate that, despite confinement and its consequences, a pandemic can be a good time to quit smoking, with the support of a smoking unit, telephone consultations, and drug treatment.

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