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Surgery and the Covid-19 epidemic: some additional precautions

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**Surgery and the Covid-19 epidemic: some additional precautions**

**Re: “Strategy for the practice of digestive and oncological surgery during the Covid-19 epidemic”**

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In this very particular moment through which we are living, we read with great interest the text by Tuech *et al.* on surgical practice during the Covid-19 epidemic (1). We salute the high quality of this work and the effort it represents in this particularly difficult period.

However, we would like to highlight a few technical points. Precautions to protect personnel from potentially contaminated surgical aerosols deserve to be detailed. First of all, during an active epidemic, given the large number of healthy carriers (2), it must be emphasized that protective measures must be used in the care of all patients. Wearing of glasses for eye protection should be made mandatory for the entire surgical team in all rooms where laparoscopy is in progress. The authors emphasize the prevention of pneumoperitoneal leakage through the use of a balloon trocar and the need to aspirate the pneumoperitoneum before removal of the trocars.

We would like to add two additional precautions. First of all it seems desirable to avoid the use of sutures with extracorporeal knots, which are carried out through 5 mm trocars at the cost of a permanent air leak; while such an air leak is not very annoying in normal times since it is easily compensated by modern insufflators, it constitutes a potential danger in the context of the ongoing epidemic.

Another delicate phase in laparoscopic surgery is the extraction of resected specimens. Removal of the specimen, whether transabdominal or transvaginal, is often accompanied by partial or complete exsufflation that is often abrupt and poorly controlled. To limit this risk, we must compel ourselves to aspirate the pneumoperitoneum as completely as possible before specimen extraction.

The search for air leaks and control of exsufflation are very important to prevent tumor seeding in oncological surgery. They become even more worrying when they endanger the safety of personnel and operators during this time of epidemic.

This drastic hunt to eliminate the chimney effect will undoubtedly be improved by the worries each of us face from a danger that we know so little about. It is obvious that some of the reflexes that we must acquire during this period will have to be preserved and incorporated into teaching and everyday practice to optimize the care of tomorrow's patients. This situation argues in favor of low-pressure insufflation (< 10 mm Hg) whenever possible and the use of an automatic smoke extractor (3). At the inception of endoscopic cancer treatment, experimental

studies suggested several technical points (4). Recent clinical data on cervical cancer probably confirm their importance (5). Today we must remember them for the safety of the entire surgical team and also continue their use in the treatment of benign pathologies in a context that we had not imagined but which will remain exemplary in the future.

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