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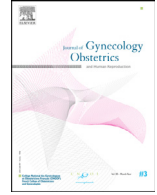
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Letter to the editor

Antenatal telehealth for anaesthesia consultations at the time of lockdown during the first COVID-19 wave in Paris[☆]



Rapid implementation of telehealth has occurred at the time of the first COVID-19 wave in most medical domains. In obstetrics, Palmer et al. [1] have recently described the implementation of a telehealth system for pregnant women in Australia and they showed that telehealth care reduced the need for in-person consultations by 50%. The follow-up showing that pregnancy outcomes were not compromised was an important result.

In the description of the programme, obstetric anaesthesia service was not discussed. This was certainly related to the fact that anaesthesia consultations were planned only for high-risk pregnant patients. This is different in France where anaesthesia consultations are mandatory by law since 1998 [2]. In brief, all women should have had an anaesthesia consultation during pregnancy and this is generally planned at the start of the third trimester, unless it is necessary earlier because of a concerning pre-existing disease or a complication of pregnancy. It is of note that the rate of epidural analgesia for laboring patients is around 80% and greater than 90% for caesarean delivery in France [3].

Because up to 800,000 patients deliver in France each year, anaesthesia services have been obliged to adapt to this huge number of in-person pre-anaesthetic consultations. At the time of the first COVID-19 wave, telehealth was implemented by many units. This was facilitated by governmental initiatives which invited to develop telehealth in obstetrics [4] and had previously allowed a similar reimbursement rate for telehealth consultations in obstetrics (including anaesthesia) [5].

We would like to report here the prospective analysis of pre-anaesthesia consultations for pregnant women which were performed during the lockdown period in the Paris area between March 15 and May 29, 2020. Ethical committee approval was obtained at the start of the study. Five hospitals volunteered to participate in this survey. All but one were academic institutions and overall represent 15,500 deliveries a year. During the study period, 2628 anaesthesia consultations were planned for obstetric outpatients among which 1602 (61%) were performed by telehealth. Patients who could be included in the telehealth programme were selected by the midwife or the obstetrician in charge.

The first part of the paper-based questionnaire was filled out at the time of the pre-anaesthesia consultation and recorded the technical details of the consultation, if parts of the consultation could not be informed and the overall provider's view. It also assessed whether the consultation detected a specific problem which required a second consultation (i.e. in-person consultation with an anaesthetist or another specialist). The second part was filled out at the time of delivery and recorded whether new information obtained at the time of the in-person assessment was important for the patient's care.

Patient satisfaction regarding the telehealth system was also recorded.

Among 402 telehealth forms collected (25%), two consultations were not performed at all due to patient's misunderstanding or unavailability and 10 were reported to a later date.

Telephone was used in 100% of cases. Information which could not be obtained during the telehealth consultation included results on patient's back and airway examination, obstetric ultrasound results and blood results (data absent in 100, 97, 4.5 and 5% respectively). A second, in-person consultation was planned in 7.5% of patients. Overall, physicians felt satisfied both as regard to the medical information obtained and for the quality of communication (numerical scale: 8.4/10 and 8.9/10 respectively).

At the time of delivery, the anaesthetist obtained additional information on the patient's history in 7% of cases, on the placental position (ultrasound) in 11% of cases and on airway and back examination in 95 and 86.5% of cases respectively. Overall the physician in charge at the time of delivery felt that some relevant information was still lacking after the telehealth consultation in 10% of cases and that this constituted a loss of opportunity in 1.5% of cases.

Patients were satisfied or very satisfied in 94% of cases.

This preliminary study assessed the value of telehealth consultation for obstetric anaesthesia [6], a service which was implemented in only several weeks due to lockdown. Despite a limited number of cases and a relatively low response rate, the overall results show that the new process was feasible. Despite some parts of the consultation could not be performed (mainly physical examination and vital signs monitoring), loss of opportunity for the patient was almost never encountered.

Triage performed by midwives and obstetricians led to a minimal rate of escalated care although it cannot be stated how many additional patients could have benefited from the system. The patient's severity threshold at which telehealth would become risky is not known but some have advised that all pre-anaesthetic consultations could become virtual [7].

Because the telehealth consultation allowed to obtain medical information about patient's history, most medical problems requiring a more in-depth analysis could be captured and the required changes were implemented on time.

The rate of telehealth consultations varied between the five hospitals (range: 39–88%), probably because triage was not standardised but also because some hospitals were structures with many high-risk pregnancies and emergency cases while others had to care for less complex cases.

Almost all telehealth consultations were performed by telephone due to initial unavailability of video-conference tools. Although the

telephone model may provide satisfactory results [8,9] video-conference is likely better as it improves the patient-physician relation, allows to verify patient's identity, provides access to the patient's records and in some cases to perform part of the physical examination (i.e. airway, auscultation). Patients were satisfied, probably because travel time and inconvenience were reduced and also because they were not being obliged to come to the hospital. Some patients may however feel that telemedicine diminishes the doctor-patient relationship [10].

The present results encourage organisations to maintain the process beyond the COVID-19 pandemic, to provide the necessary technical tools (video) and to test other patients' conditions in which anaesthesia telehealth could be performed safely and efficiently.

Declaration of Competing Interest

Authors declare that they have no conflict of interest.

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