

INTERVIEW

REMOVE THE RISKS OF FORMALIN IN THE OPERATING ROOM THANKS TO TissueSAFE plus

THE EXPERIENCE OF HOSPITALS LOUIS-MOURIER AND BICHAT-CLAUDE-BERNARD

Interview with Christine Pizzella, Manager of the operating theater at Louis-Mourier Hospital



Christine Pizzella next to the TissueSAFE plus unit installed in the operating room of the Louis-Mourier Hospital.

Q: Thank you for welcoming us, the end of the COVID peak finally allows us to come and collect your testimony!

In your job, you are subject to biological but also chemical risks. It seems that the nursing staff is very sensitive to biological risks but much less to chemical risks. Have you received any training on chemical risks during your studies or during your professional career?

A: My studies are distant but **I do not remember having received any training on chemical risks during my studies, and that was not the case either during my career.** I had the curiosity to look up the meaning of the pictograms on the products we used; however, nothing was put in place to protect us from chemical risks. For example, we handled the products used for chemotherapy without any precaution. It took several years for protection solutions to be put in place.

Q: Do you know whether the majority of operating room personnel are aware of the dangers of the formalin they use on a daily basis?

A: I couldn't say. As far as I am concerned, I don't even remember when I found out that **formalin was a CMR (Carcinogenic Mutagenic Reprotoxic) agent.** It seems to me that I learned it simply by being alerted by the pictograms on the formalin products. Otherwise, I don't see how I could have been informed.

Q: In what context did you set up the TissueSAFE plus, the vacuum solution for samples?

A: I wasn't there when TissueSAFE plus was chosen in 2017, I was working on Bichat at the time. I have been Manager of the operating at the Louis-Mourier Hospital for 3 years. In 2017, the anatomo-pathology laboratory of the Louis-Mourier Hospital closed and its activity was transferred to the laboratory of Bichat-Claude-Bernard Hospital. **Therefore it was necessary to find a solution to avoid having to put large samples in formaldehyde in the Louis-Mourier operating room.** I discovered the TissueSAFE plus automaton when I arrived here.

Q: How are you organized with TissueSAFE plus today?

A: At Louis-Mourier, we have a multidisciplinary operating theater (gynecology, gastroenterology, urology, ENT, ophthalmology, odontology and endoscopy) consisting of **6 operating rooms.** The Department has **13 operating theater nurses who all use the TissueSAFE plus: this machine was installed in a room located next to the operating rooms.**

Large samples (size \geq a gallbladder) are placed under vacuum just after their extraction or at the end of the operation and then placed in the refrigerator. The operations generally last between 3 and 4 hours, the samples are obtained after approximately 2 hours of operation. They are placed under vacuum at the latest 2h after their extraction and in the meantime are kept at room temperature in the operating room. **We use a single vacuum program and for each sample, we stick the label printed by the TissueSAFE plus on its bag. This label shows the vacuum date and time, user and patient ID.**

The TissueSAFE plus bags include a **kangaroo pocket in which we can insert the patient's card.** The vacuum-sealed samples are then sent to the sorting center: the courier passes twice a day, once before 8 a.m. and a second time before noon. At the sorting center, the vacuum-sealed samples are kept at 4-8°C during the storage time and during their transport to the anatomo-pathology laboratory of the Bichat-Claude-Bernard Hospital.

Q: What is your team's feedback on the TISSUESAFE plus or its consumables?

A: This unit installed in 2017 has been well integrated into our service. **The team finds it easy to use and robust. Since my arrival 3 years ago, we have had only one breakdown and your after-sales service have intervened during the day.** As for the TissueSAFE plus bags, I have never heard of any problems with leaks or perforations, **they are very resistant.** I have no negative point to raise about this device, **it gives us complete satisfaction.**

Q: Vacuum-sealed samples can be stored at 4-8 °C for 72 hours and 48 hours for colon-type hollow parts. Have you ever had complaints from the laboratory related to a loss of integrity of the samples?

A: I have never had a complaint from the laboratory. With the organization in place, the samples are fixed before 72 hours and **we have never had a return from the laboratory indicating a problem with the preservation of any type of samples.**

Q: Thank you very much for your welcome and the time you have devoted to us. We are now going to the Bichat-Claude-Bernard Hospital to collect the testimony of the anatomopathology laboratory. Good luck and we take this opportunity to congratulate you and your entire team for your commitment and courage during the COVID peaks!

Interview with Corinne Roelants, Health Manager of the anatomo-pathology laboratory of the Bichat Hospital Claude-Bernard



Corinne Roelants, Manager of the anatomo-pathology laboratory of the Bichat-Claude-Bernard hospital in the macroscopy room.

Q: Thank you Mrs Roelants. Can you introduce us to the laboratory and explain how you decided to choose the TissueSAFE plus for the operating room of Louis-Mouries?

A: The anatomo-pathology laboratory has around 50 people, including around ten doctors and interns and around twenty technicians. We receive samples from several healthcare departments: dermatology, gastroenterology, gynecology, nephrology, ENT and pulmonology mainly. In 2017, when Louis-Mourier's anatomo-pathology laboratory closed, we recovered 80% of its activity. There was no question of asking the OR to put the samples in formalin knowing that they had no protection against the risk of formaldehyde.

Continuing to fix the samples in the laboratory seemed obvious to us insofar as we were equipped with ventilated macroscopy tables which therefore well protect against formaldehyde fumes. We were thus very quickly oriented towards the vacuum-sealing of samples in the operating room by choosing the TissueAFE plus solution. The Louis-Mourier staff sends us an average of ten vacuum-sealed samples every day.

Q: Did you meet any problems with the vacuum-sealed samples at Louis-Mourier? For example integrity problems in particular with hollow samples or fragile fabrics damaged by vacuum?

A: At the beginning, we had received a few bags that had not been properly closed, but it was a matter of training the operating room staff. Other than this start-up phase, **we've never had a problem, and I've never heard of any preservation issues or "crushed samples"**. We receive vacuum-sealed items from Louis-Mourier twice a day, around 10 a.m. and then around 2 p.m. The vast majority of samples are fixed in less than 24 hours. For Friday afternoon operations, we receive the samples on Monday morning, so they are fixed within 72 hours.

Q: In terms of traceability, do you have all the information required on the ticket printed by the TissueSAFE plus, or do you have any improvements to make?

A: We have the most important information, **the Permanent Patient Identifier Number, the date and time of collection.**

Q: Thank you again for your testimony and for your kindness towards the nursing staff, protecting them against the formalin risk is a noble cause!

This interview has been conducted by L. Garbez and V. Lafargue of MM France company - exclusive Milestone distributor in France.



TissueSAFE plus device and vacuum-sealed bag