Liquid-Based Cytology Specimen Preparation in the Era of the COVID-19 Pandemic: The Experience of a Laboratory in a Portuguese Central Hospital

The ongoing coronavirus disease 2019 (COVID-19) pandemic has dramatically changed the global *status quo*, with millions of people throughout the world infected, leading to hundreds of thousands of deaths and posing novel challenges to health care services worldwide. We read the article by Straccia et al[1] regarding a protocol that has been optimized for the safe management of liquid-based cytology samples in the COVID-19 era using an initial 70% ethanol-based sterilization procedure. We were thrilled to learn that a method similar to what we proposed in an article available online since July 1st 2020 in the *Annals of Diagnostic Pathology* website entitled "The Anatomic Pathology laboratory adjustments in the era of COVID-19 pandemic: The experience of a laboratory in a Portuguese central hospital"[2] yielded results approximately the same as ours, namely the decreased cellularity of the samples, an increase in the amount of fibrin within the background, and changes in cell and nuclear size. It is interesting to note that we also compared the "standard" procedure with a new method for liquid-based cytology that is centered on heat-based sterilization (pasteurization), gathering knowledge from previous studies that demonstrated that different coronaviruses can become noninfectious upon heat exposure, after 90 minutes at 56 °C, 60 minutes at 67 °C, or 30 minutes at 75 °C,[3] and considered an effective method with which to inactivate severe acute respiratory syndrome (SARS)–associated coronaviruses in biological liquids such as blood and its derivatives.[4] In our hands, this method proved to be noninferior to standard protocols and therefore is an appealing alternative to a 70% ethanol-based viral inactivation. We currently are expanding this approach and conducting a comprehensive analysis to demonstrate the robustness of the protocol. It is of fundamental value that pathologists share their approaches to dealing with patient samples in the face of a second global wave of COVID-19. By sharing our novel optimized protocols, we all will be better equipped to meet the challenges posed by this novel coronavirus.

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CONFLICT OF INTEREST DISCLOSURES

The authors declare no conflicts of interest.
The authors of the original article were given the opportunity to respond but declined.

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Nuno Jorge Lamas, MD, PhD
Anatomic Pathology Service, Pathology Department, Hospital and University Center of Porto, Porto, Portugal

Francisca Emanuel Costa, MD
Anatomic Pathology Service, Pathology Department, Hospital and University Center of Porto, Porto, Portugal

José Ramón Vizcaíno, MD
Anatomic Pathology Service, Pathology Department, Hospital and University Center of Porto, Porto, Portugal

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