Q&A column

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Submit your pathology-related question for reply by appropriate medical consultants. CAP TODAY will make every effort to answer all relevant questions. However, those questions that are not of general interest may not receive a reply. For your question to be considered, you must include your name and address; this information will be omitted if your question is published in CAP TODAY. **Submit a question**.

Q. Some of my laboratory staff are reluctant to reach out to the CAP with accreditation questions on checklist requirements because they fear that doing so will lead CAP inspectors to scrutinize those related items more closely during the next inspection. How does the College manage information from these phone calls?

A. September 2025— Laboratories contact CAP accreditation technical specialists for a variety of reasons. The primary reason is to seek guidance on how to interpret CAP and CLIA requirements.

Each laboratory is set up differently and has unique processes. This may lead to confusion on how to meet the intent of a checklist requirement without compromising laboratory workflow. Often, there's disagreement among laboratory personnel on how to interpret a requirement. Contacting the CAP provides the opportunity for meaningful discussion on how to interpret a requirement and apply it to the specific laboratory scenario.

The discussions between laboratories and the College are intended to be educational, with the CAP technical team providing guidance. The CAP collects data on the person contacting the College and a summary of the discussion as documentation for both the laboratory and CAP in the event that the conversation needs to be revisited—for example, if there are follow-up questions or requests for an emailed response. The College also evaluates these discussion summaries for trends in order to generate ideas for educational presentations, create frequently asked questions, prompt discussions at CAP technical staff meetings regarding consistent interpretation, and consider potential checklist revisions. This provides the CAP and others with the opportunity to learn from the questions received.

The discussion summaries regarding checklist requirement interpretation are not shared with the next inspection team. Since information is not shared in this fashion, there is no need to fear that the questions will lead to additional scrutiny.

Other types of communication are recorded and may be shared with inspectors, such as complaints from laboratory personnel about laboratory quality or safety, information on validation inspections conducted at the laboratory, and investigations by a government entity. These extend beyond a routine checklist-interpretation inquiry. In addition, communications directly impacting an upcoming inspection, including such site-specific arrangements as security access and relocation, as well as test menu changes and laboratory director changes, are communicated to the inspection team.

To contact a CAP accreditation technical specialist, call 800-323-4040 ext. 6065 or email accred@cap.org. CAP-accredited laboratories can also access checklist accreditation tools and resources, such as frequently asked questions and templates, by logging in to the e-LAB Solutions Suite from the CAP website home page (www.cap.org) and clicking on the Accreditation Resources tab.

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Q. An oncologist recently told me to perform a platelet count on a sodium citrate (blue top) tube even though the platelet results from the EDTA tube were valid—no platelet flags, a Q-flag value of zero, a normal platelet histogram, and no clumps seen on slide review. Based on this evidence, this patient is not an EDTA clumper and using the blue-top tube isn't indicated or recommended, as far as I know. What is the science behind this request? There were platelet clumps in the blue-top tubes (platelet instrument flags and clumps seen on the slides from the citrate tubes), which further invalidated these results in my opinion as a licensed laboratory scientist.

A. EDTA-induced platelet clumping is a well-documented in vitro artifact that can falsely lower platelet counts, but if all indicators (instrumental and microscopic) point to an accurate EDTA count, then performing a citrate count typically is not warranted.

From a scientific standpoint, the rationale behind using a sodium citrate tube is to circumvent EDTA-induced clumping. Citrate is less likely to cause conformational changes to platelet membrane glycoproteins that expose neoantigens targeted by naturally occurring antibodies—believed to be the mechanism behind EDTA-dependent pseudothrombocytopenia.[1] However, citrate itself can result in platelet activation or clumping in rare cases, especially if there is a sample handling delay or if the tube is underfilled, or if the patient has a propensity for in vitro clumping regardless of the anticoagulant used.[2] Since the EDTA tube results appear to be valid in this case and the citrate tube showed clumping, one can interpret that the EDTA count was the more accurate of the two.

This may have been a misunderstanding by the clinician or a practice rooted in previous experience with pseudothrombocytopenia. It is also possible the clinician misinterpreted past platelet values or was not aware that EDTA pseudothrombocytopenia is an in vitro artifact rather than a clinical condition. In these scenarios, it's helpful to diplomatically communicate the science and ensure there's clarity about when alternative anticoagulants are indicated.

As a licensed laboratory professional, you are correct to advocate for scientifically sound testing. Your judgment in this situation is well supported by current hematology best practices and Clinical and Laboratory Standards Institute guidelines.

1. Schuff-Werner P, Mansour J, Gropp A. Pseudo-thrombocytopenia (PTCP). A challenge in the daily laboratory routine? *J Lab Med*. 2020;44(5):295–304.
2. Schrezenmeier H, Müller H, Gunsilius E, Heimpel H, Seifried E. Anticoagulant-induced pseudothrombocytopenia and pseudoleucocytosis. *Thromb Haemost*. 1995;73(3):506–513.

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