Colleagues,

Happy Holidays! In our ongoing efforts to improve patient safety at UCSF, we disseminate a monthly patient safety bulletin to share important updates with UCSF providers and staff. In this issue, we highlight the importance of transfusion safety as well as several great catches made by UCSF employees.

Thank you for your ongoing commitment to patient safety at UCSF. We hope you enjoy our new format.

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Ensuring Transfusion Safety

What happened?

A patient required a platelet transfusion as part of ongoing treatment for underlying cancer. Shortly after initiation of the transfusion, he became tachycardic. A code was called and he was transferred to the ICU for further care. Cultures from both the platelet bag and the patient's blood grew the same bacterial isolate.

A patient with a hematologic malignancy received a platelet transfusion. Shortly after initiation of the transfusion, she was noted to have increased pain and tachycardia. The transfusion reaction protocol was initiated. Her clinical condition worsened and she was transferred to the ICU. Cultures from both the platelet bag and the patient's blood grew the same bacterial isolate.

What went wrong?

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Both of these cases represent extremely rare events in which patients received contaminated platelets leading to septic transfusion reactions. UCSF immediately initiated thorough workup and investigation in both cases, which included both internal and external review of current blood bank and blood product administration processes. Investigation revealed that in both cases, contamination occurred prior to receipt of the platelet products by UCSF.

In response to these events, UCSF has moved to using pathogen-reduced platelets to reduce the risk of septic transfusion reactions. UCSF is also working to raise awareness among providers and staff regarding both septic transfusion reactions (rare) and transfusion reactions in general (much more common), so that appropriate action is taken in a timely manner.

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**What should I do if suspect a transfusion reaction?**

**When to suspect a transfusion reaction:**
- A transfusion reaction should be suspected in any patient who develops symptoms during or after receiving a transfusion
- Most reactions represent febrile non-hemolytic or allergic reactions and happen shortly after initiation/completion of the transfusion (within 2-4 hours), although septic reactions may present in a delayed manner (up to 24 hours after product administration)
- The most common symptoms include fever, chills, itching and/or urticaria
- Findings suggestive of a more severe reaction including respiratory distress, hypertension or hypotension, flank or back pain and abnormal bleeding

**If a transfusion reaction is suspected:**
- Immediately stop the transfusion
- Notify the primary provider immediately
- Confirm that the correct product was administered to the correct patient
- Assess the product for color changes or abnormal appearance suggestive of bacterial contamination
- Notify the blood bank immediately to discuss appropriate evaluation and management of the patient
- Save the blood bag and tubing and send them to the blood bank with the “Report of Possible Transfusion Reaction” form #705-033
- Obtain a blood specimen from the patient per the “Activate Transfusion Reaction Protocol” order
- If the patient is immunosuppressed or febrile, and a septic transfusion reaction is suspected, order blood cultures and consider empiric antibiotic therapy
- Refer to the nursing procedures manual regarding blood product transfusion/administration

**Why prompt notification of the UCSF blood bank is important when a transfusion reaction is suspected:**
- Facilitates appropriate workup and management of the patient
- Ensures necessary testing of the blood product in question as well as any existing co-components that may be available for other patients
- Ensures that other hospitals receiving products from the same donor can be notified if contamination is suspected

**Contacting the blood bank:**
- Blood bank phone numbers: 415 353-1313 (Moffitt-Long), 415 476-1404 (Mission Bay) and 415 885-7791 (Mt. Zion)
- The blood bank staff will then notify the resident on call
- For questions related to transfusion reactions and the blood bank, please email: Ashok.Nambiar2@ucsf.edu

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**Stopping for Safety**

Highly reliable organizations maintain a preoccupation with failure and the capacity to manage complex and unexpected events, prioritizing safety above all else. At UCSF, the STOP for Safety framework has been developed to emphasize how individual actions and behaviors can play a role in preventing harm and promoting safety. The cases above are examples of recent events where this framework can play a role in understanding how to prevent harm.

**Stop the line and speak up:**
**Push concerns up the chain of command:** Concerns regarding both transfusion reactions and the blood bank, please email: Ashok.Nambiar2@ucsf.edu
In these cases, the care team stopped the transfusion, notified the blood bank and rapidly initiated necessary care for the patients involved.

**Take the time to review:**
For these events, providers and staff took time to review that the appropriate product was administered to the appropriate patient. This is standard work with regard to the transfusion of blood products. The care team also took time to review potential causes of the transfusion reaction, saving the platelet bags for further analysis by the blood bank.

**Great Catches for Patient Safety**

The “Great Catch for Patient Safety” program seeks to formally recognize staff, faculty and trainees who report safety issues and take action to prevent or mitigate harm. Nominations are obtained from the incident reporting system or word of mouth, vetted by the Patient Safety Committee and publicly acknowledged at the monthly Medical Center manager’s meeting. Recipients receive a certificate and letter of appreciation. The following employees went above and beyond to “stop-the-line” for patient safety:

**Angela Laffan, NP, Cancer Center**
Took time to review information and ask questions regarding abnormal imaging scans which noted a slow-growing pulmonary nodule resulting in biopsy and surgical removal

**Kent Truong, MD, Pathology and Laboratory Medicine**
Took time to review information, ask questions, and involve the oncology team in decision making to ensure appropriate workup of a transfusion reaction

Want to recognize someone for a great catch for patient safety? Email: [James.Stotts@ucsf.edu](mailto:James.Stotts@ucsf.edu)

From the UCSF Patient Safety Committee. Editors: Adrienne Green MD (Professor of Medicine, CMO), Jim Stotts RN (Assistant Clinical Professor, Patient Safety Officer), and Kiran Gupta, MD, MPH (Assistant Clinical Professor of Medicine, Medical Director for Patient Safety). Please contact Kiran Gupta at Kiran.Gupta@ucsf.edu with questions.

Disclaimer: Clinical details of cases have been altered to protect patient & provider confidentiality.