

COVID-19 and Its Impact on Collection and Processing of Cord Blood Units at the Cleveland Cord Blood Center

KATHY BOBIK-KURZ, MARCIE FINNEY, KIM VINCENT, MARY LAUGHLIN

Cleveland Cord Blood Center, Cleveland, Ohio, USA

ABSTRACT 15

Introduction

The Cleveland Cord Blood Center's (CCBC) commitment to providing quality cord blood units to patients in need was challenged with the outbreak of the COVID-19 pandemic. Research performed in the U.S. and internationally indicated low risk of transfer from mother to fetus.

Objective

CCBC's approach was to continue to collect cord blood units from our five collection sites in Cleveland, Georgia, and California and to closely study the impact COVID-19 might have on collection and processing numbers. Collection coordinators are employees of the hospital collection sites, with the exception of California. The CCBC maintained minimal on-site staffing (2 processing technicians, 1 quality, 1 collection, 1 management, and 1 admin.). Donors with positive COVID-19 testing and those exhibiting symptoms were excluded from consent and collection.

Methods

Our study design would take a retrospective look at data collected from the onset of COVID-19 in March through June 2020 and compare data from March through June in 2019, taking into consideration factors that would potentially skew the outcomes. Factors included whether hospitals allowed collections to

continue, birth numbers, number of COVID-19-positive patients, shipping interruptions, and staff outbreaks of COVID-19.

Results

One collection site stopped collections 2 weeks into the study; four continued collections throughout the 4-month period. There was minimal impact to CCBC collection and processing totals. Our California site has historically low volume collections; the average collected March 2019 to June 2019 was 26 with 3 processed. Donations lost due to COVID-19-positive testing or high risk totaled 43. Seven units were discarded due to flight interruptions caused by COVID-19. Percentage of processed units showed an increase from 2019 with the exception of one site; most of the non-processed units were due to low total nucleated cell count, which is common at this site. No impact was observed due to staffing, as staffing remained unchanged. There was no impact on units shipped for transplantation; the number shipped was within the normal range for this period and all units were shipped without interruption due to transportation.

Discussion

In conclusion, although the CCBC made staffing adjustments and did not collect at one collection hospital in response to the COVID-19 pandemic, overall productivity of the cord blood bank was not dramatically affected.