

PENGARUH ORAL CARE KOLOSTRUM TERHADAP KADAR FEKAL IMMUNOGLOBULIN A SEKRETORIK A PADA BAYI KURANG BULAN

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ABSTRAK

Latar Belakang: Kelahiran kurang bulan merupakan masalah kesehatan global karena morbiditas dan mortalitasnya. Infeksi merupakan komplikasi yang sering terjadi pada bayi kurang bulan dan berkontribusi besar terhadap kematian bayi baru lahir. Oral care kolostrum dilakukan sebagai salah satu upaya pencegahan terhadap infeksi pada bayi baru lahir dengan meningkatkan kadar immunoglobulin A sekretorik.

Tujuan: Menganalisis pengaruh oral care kolostrum terhadap kadar fekal immunoglobulin A sekretorik pada bayi kurang bulan.

Metode: Tiga puluh delapan bayi yang memenuhi kriteria inklusi dilakukan randomisasi. Dua puluh bayi kelompok oral care kolostrum dan delapan belas bayi kelompok kontrol. Oral care kolostrum dengan memberikan kolostrum sebanyak 0,1 ml pada masing-masing mukosa bukal kurang lebih 2 menit pada satu sisi. Prosedur diberikan ulang setiap 4 jam selama 3 hari. Kadar fekal immunoglobulin A sekretorik diambil dari fekal pertama setelah lahir dan 72 jam setelah pemberian kolostrum. Pengambilan fekal terlebih dahulu memasang alat urin tampung agar urin tidak membasahi sampel.

Hasil: Kadar fekal immunoglobulin A sekretorik sebelum perlakuan pada kelompok perlakuan sebesar $0,0633 \pm 0,0037$ mg/g feses lebih tinggi daripada kelompok kontrol $0,0166 \pm 0,0139$ mg/g feses, secara statistik tidak terdapat perbedaan bermakna ($p=0,595$). Kadar fekal immunoglobulin A sekretorik setelah perlakuan pada kelompok perlakuan sebesar $1,1007 \pm 0,2458$ mg/g feses lebih tinggi daripada kelompok kontrol $0,6045 \pm 0,2358$ mg/g feses secara statistik tidak terdapat perbedaan bermakna ($p=0,09$). Selisih kenaikan kadar fekal immunoglobulin A sekretorik sesudah dan sebelum perlakuan pada kelompok perlakuan $1,0374 \pm 0,2575$ mg/g feses lebih tinggi daripada kelompok kontrol $0,5879 \pm 0,2385$ mg/g feses, berpotensi bermakna secara statistik ($p=0,09$).

Kesimpulan: Pemberian oral care kolostrum terbukti meningkatkan kadar fekal immunoglobulin A sekretorik pada bayi kurang bulan dibandingkan sebelum diberikan oral care kolostrum, serta oral care kolostrum potensial meningkatkan kadar fekal immunoglobulin A sekretorik pada bayi kurang bulan dibandingkan tidak diberikan oral care kolostrum.

Kata kunci: oral care kolostrum, sIgA, bayi kurang bulan

EFFECT OF ORAL CARE COLOSTRUM ON THE LEVEL OF FECAL IMMUNOGLOBULIN A SECRETORY IN PRETERM INFANTS

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ABSTRACT

Background: Preterm infants is a global health problem because of its morbidity and mortality. Infection is a complication that often occurs in infants and contributes greatly to the death of newborns. Colostrum oral care is done as an effort to prevent infection in newborns by increasing secretory immunoglobulin A levels.

Objectives: To evaluate whether oral care colostrum can increase fecal secretory immunoglobulin A levels in preterm infants.

Methods: Thirty-eight infants who met the inclusion criteria were randomized. Twenty colostrum oral care infants and eighteen control control infants. Colostrum oral care by giving as much as 0.1 ml of colostrum on each buccal mucosa for approximately 2 minutes on one side. The procedure is repeated every 4 hours for 3 days. Fecal secretory immunoglobulin A levels are taken from the first faecal after birth and 72 hours after colostrum administration. Fecal retrieval must first install a urine device so that the urine does not wet the sample.

Results: Fecal secretory immunoglobulin A level before treatment in the treatment group were 0.0633 ± 0.0037 mg/g feces higher than the control group 0.0166 ± 0.0139 mg/g feces, statistically there were no significant differences ($p = 0.595$). Fecal secretory immunoglobulin A level after treatment in the treatment group amounted to $1,1007 \pm 0.2458$ mg/g feces higher than the control group 0.6045 ± 0.2358 mg/g faeces statistically there were no significant differences ($p = 0.09$). Difference in increase in secretory fecal immunoglobulin A levels after and before treatment in the treatment group 1.0374 ± 0.2575 mg/g feces is higher than the control group 0.5879 ± 0.2385 mg/g feces, potentially statistically significant ($p = 0, 09$).

Conclusion: Oral care colostrum has been shown to increase secretory immunoglobulin A levels in preterm infants before colostrum oral care, and colostrum oral care has the potential to increase faecal secretory immunoglobulin A level than controls in preterm infants.

Keywords: oral care colostrum, sIgA, preterm infants