

## Medications

Ceftriaxone 900 mg in 0.9% NS IVPB Peds q24

Pharmacologic: Third generation cephalosporin

Therapeutic: Antibiotic

Patient is taking this medication to fight the infection that is causing the cellulitis.

Key nursing assessments prior to administration should include history of allergies to antibiotics, CMP, and CBC, and making sure cultures were drawn if needed.

Clindamycin in NS IVPB 120 mg q6 120 ml/hr

Pharmacologic: Lincosamide

Therapeutic: antibiotic

Patient is taking this medication to help fight the infection causing the cellulitis.

Key nursing assessments prior to administration should be allergies to any antibiotics previously, assure that labs have been drawn.

Bacitracin- polymyxin b Topical PRN to affected cheek

Pharmacologic class: Antibacterial combination

Therapeutic: Antibiotic

Patient is using this to prevent further infection at the site of the scratch.

Key assessments prior to administration should be an assessment of the wound site.

## Demographic Data

**Admitting diagnosis:** Periorbital Cellulitis (left)

**Age of client:** 2 years old

**Sex:** Female

**Weight in kgs:** 11.9 kg

**Allergies:** No Known allergies

**Date of admission:** 1/18/2023

**Psychosocial Developmental Stage:** Autonomy vs. Shame

**Cognitive Development Stage:** Preoperational stage

## Admission History

## Pathophysiology

**Disease process:** Periorbital cellulitis is caused by an infection to the skin and soft tissue surround the eye. This can be caused by local trauma, sinus infections and eye infections. It is typically caused by *S. aureus*, *S. pyogenes*, *S. pneumoniae* (Bae & Bourget, 2022).

**S/S of disease:** Symptoms of periorbital cellulitis can include swelling of the eyelid and skin around the eye and discoloration or redness (*Periorbital cellulitis: Diagnosis, symptoms & treatment 2022*). Upon assessment of the patient these symptoms are present.

### Method of Diagnosis:

Methods diagnosis are typically just assessment based. A provider will assess the area and determine but may get a CT scan to rule out any other issues (*Periorbital cellulitis: Diagnosis, symptoms & treatment 2022*). The patient did receive a CT scan to determine if it was orbital or periorbital cellulitis.

**Treatment of disease:** Treatment of the disease includes antibiotics. If the case is mild oral or liquid may be a viable option, but if worsening IV antibiotics are more useful (*Periorbital cellulitis: Diagnosis, symptoms & treatment 2022*). The patient is on two IV antibiotics clindamycin and ceftriaxone.

The patient scratched face their face around the left eye on 1/15/2023, mother attempted to treat at home with an antibiotic ointment with no improvement. Mother noticed redness and swelling increased 1/16. Mother took child to convenient care where the patient was placed on Bactrim. No improvement noted. Mother brought patient to Hoopston ER on 1/18 where they were then transferred to Carle Champaign and admitted.

### Relevant Lab Values/Diagnostics

WBC: 15.79  
Normal value: 5.1-13.4  
Platelet: 426  
Normal value: 189-394  
MPV: 9.7  
ABS neutrophils: 10.92  
Normal values: 1.54-7.92  
ABS Monocytes: 1.22  
Normal value: 0.24- 0.92  
**CT orbital with contrast showed extensive periorbital soft tissue swelling.**  
The patient has an infection which causes a increase in the bodies immune response therefore increasing the bodies white blood cells.

### Medical History

**Previous Medical History:** N/A

**Prior Hospitalizations:** N/A

**Past Surgical History:** N/A

**Social needs:** Patient referred to Child Life Specialists. Patient is also being monitored for ASD.

### Active Orders

Vitals q4 hours

Blood Pressure: q8 while awake

Strict I & O

Weight in kg once per week

These orders are standard for Carle facility when there is a pediatric patient. Times for vitals are based on acuity as well as blood pressure. Strict I & O is because younger patients should be having normal urinary and bowel movements. The weight once per week is to make sure the patient is progressing as normal.

**Assessment**

<b>General</b>	The patient is alert and oriented based on her ability to look at you when speaking, looking around the room, watching the TV and recognizing the foster mother. Patient is showing signs of agitation through crying and flailing.
<b>Integument</b>	Redness and swelling around left eye, small scab on upper lip. Otherwise normal. Skin is warm, dry and intact.
<b>HEENT</b>	Left eye edema and redness. Patient is tearful but tears appear clear. Unable to assess ears, nose, and mouth and throat with patient in distress.
<b>Cardiovascular</b>	Heart sounds are normal. Capillary refills <3 seconds. Pulses palpable 2+ in radial, brachial, popliteal, and pedal bilaterally. No edema noted in appendages.
<b>Respiratory</b>	Airway normal and patent without signs of change from baseline. Chest rises and falls. No accessory muscle use. Lung sounds hard to assess with tearful and wailing patient.
<b>Genitourinary</b>	Genitourinary was not assessed.
<b>Gastrointestinal</b>	Bowel sounds present in all 4 quadrants. Abdomen soft with no remarkable findings.
<b>Musculoskeletal</b>	Patient has use and ability of all extremities. Patient does not appear to be in pain in any appendages.
<b>Neurological</b>	Patient appears to have some speech delay, but otherwise normal findings.
<b>Most recent VS (highlight if abnormal)</b>	<b>Time:</b> 0915 <b>Temperature:</b> 36.4 C (97.5 F) <b>Route:</b> axillary <b>RR:</b> 24 <b>HR:</b> 112 <b>BP and MAP:</b> 113/92 <b>Oxygen saturation:</b> 99

	<b>Oxygen needs: Room Air</b>
<b>Pain and Pain Scale Used</b>	FLACC score: 0 patient is not presenting with any pain.

<b>Nursing Diagnosis 1 Impaired Skin integrity related to left eye as evidenced by redness and swelling.</b>	<b>Nursing Diagnosis 2 Anxiety related to injury and admission as evidenced by agitation and distress during patient care.</b>	<b>Nursing Diagnosis 3 Parental deficiency of knowledge on wound care related to worsening of symptoms evidenced by infection.</b>
<b>Rationale</b> The patient's infections stems from the open wound on her cheek from scratching themselves. The consistent swelling and infection can cause the skin integrity to weaken.	<b>Rationale</b> The patient showed distress during patient care including IV care, assessments, and vitals.	<b>Rationale</b> After the patient received the scratch, the mother attempted to treat at home but symptoms worsened. Having more knowledge on wound care may prevent another hospitalization.
<b>Interventions</b> <b>Intervention 1:</b> Give patient toys and blocks to occupy hands so they do not scratch or touch the affected area. <b>Intervention 2:</b> Monitor the affected sight regularly to make sure no changes occur and the area maintains warmth and dryness.	<b>Interventions</b> <b>Intervention 1:</b> Care should be done all together if it can be to minimize the amount of time the patient is bothered. <b>Intervention 2:</b> Putting on a movie or show to occupy the patient while care is being performed.	<b>Interventions</b> <b>Intervention 1:</b> Teach the mother of the patient proper hand washing technique to prevent the furthering of germs into the wound. <b>Intervention 2:</b> Teach the mother wound care to prevent another hospital visit.
<b>Evaluation of Interventions</b> The patient has an assortment of toys with her that she can play with, there has been improvement with the eye and the patient appears to be leaving the area alone. Assessments are done every 8 hours to ensure the patients eye is not worsening and it has not been.	<b>Evaluation of Interventions</b> When care is clumped together the patient seems to respond better as long as there are only a few people in the room. The patient also allows more care to be performed if a movie is on.	<b>Evaluation of Interventions</b> Unable to evaluate if methods worked but parent should be able to properly wash hands and care for a wound.

### References (3):

Normal Ranges for Labs comes from Mayo Clinic Labs

Bae, C., & Bourget, D. (2022). *Periorbital cellulitis* . National Library of Medicine. Retrieved January 24, 2023, from <https://www.ncbi.nlm.nih.gov/books/NBK470408>

Jones & Bartlett Learning. (2021). *Nurse's Drug Handbook* (20th ed.)

*Periorbital cellulitis: Diagnosis, symptoms & treatment*. Cleveland Clinic. (2022). Retrieved January 23, 2023, from <https://my.clevelandclinic.org/health/diseases/23566-periorbital-cellulitis>

Phelps, L. L. (2020). Sparks & Taylor's nursing diagnosis reference manual. Wolters Kluwer.