

Pediatric Acute Visit SOAP Note/Case Study

CC
I.N. is a 12 y/o male who presents with his mother, who serves as the primary historian, to the clinic for a new onset rash with “pimples” on lower back.
HPI
I.N. presents with his mother for evaluation of a painful rash on his lower back. His mother reports that on July 13, I.N. was involved in an electric scooter accident and was transported by ambulance to the emergency department. After evaluation, he was diagnosed with a concussion, right parietal scalp hematoma, right clavicle fracture, and multiple abrasions to both the upper and lower extremities and sacrum. He was discharged home the same day. On July 15, he returned to the emergency department because his headache was progressively worsening. His mother reports that his headache improved after receiving medication, and he was discharged home with instructions to follow up with his primary care provider (PCP).
On July 17, I.N. was seen by his PCP at the clinic and the abrasion on his sacrum had developed into a superficial burn that was noted to be healing with no signs or symptoms of infection. Prior to today’s visit his mother called the nurse triage line and explained that the day before, July 20, she noticed a new rash above the healing superficial burn that appeared red with small "pimples". She also submitted a photo of the rash through MyChart. Review of the MyChart photo demonstrated an erythematous papulovesicular rash on the lower back with scattered erythematous papules and small vesicles/pustules on a background of diffuse erythema. After speaking with the nurse triage line, I.N. was scheduled for a same day appointment.
During this appointment, I.N. reports constant, moderate to severe pain that has progressively worsened since the rash first appeared. He states the pain becomes worse with movement or when the area is touched. No relieving factors were identified. He and his mother report that they have not tried any treatments, and nothing has relieved his symptoms. He currently denies fever, fatigue, itching, joint pain, or feeling generally unwell.
ROS
General: Denies fever, chills, fatigue, decreased appetite, and unintentional weight loss.
HEENT: • Head: Denies dizziness, deformities, and syncope. • Eyes: Denies vision changes, eye pain, redness, or discharge. • Ears: Denies ear pain, hearing changes, or ear drainage. • Nose: Denies nasal congestion, rhinorrhea, or epistaxis. • Throat/Mouth: Denies sore throat, dysphagia, oral lesions, or dental pain.
Respiratory: Denies cough, shortness of breath, perioral cyanosis, increased work of breathing, wheezing, or chest tightness.
Cardiovascular: Denies chest pain, palpitations, peripheral cyanosis, dizziness with activity, or edema.
Gastrointestinal: Denies abdominal pain, nausea, vomiting, diarrhea, constipation, or changes in bowel habits.
Genitourinary: Denies dysuria, urinary frequency, urgency, hematuria, or changes in urinary output.
Musculoskeletal: Reports right shoulder pain and lower back pain. Denies joint swelling, muscle weakness, or gait changes from baseline.
Skin: Reports painful abrasions and bruising to the bilateral upper and lower extremities and sacral area, with a painful rash/burn on the lower back. Denies pruritus, drainage, or bleeding from the rash or wounds.
Neurological: Reports occasional mild headaches since accident. Denies dizziness, syncope, seizures, weakness, numbness, tingling, or changes in coordination.
Psychiatric/Behavioral: Denies anxiety, depression, mood changes, sleep disturbances, behavioral changes, or suicidal ideation.

PAST HISTORY

Birth History: Born at 40w1d via SVD to a 21-year-old G2P2 mother. Birth weight was 3.675 kg, length 49.5 cm, HC 35.6 cm. Hospitalized for 2 days after birth. Pregnancy notable for late prenatal care (18 weeks), maternal diet pill exposure prior to pregnancy recognition (medication unknown), normal QUAD screen, and prenatal ultrasound identifying left cleft lip/palate at 20 weeks' gestation. Readmitted on day of life (DOL) 5 for FTT and feeding difficulties requiring NICU admission, HFNC for respiratory insufficiency, NG-tube placement DOL 5, and G-tube surgical placement on DOL 17. Additional neonatal history significant for complete left unilateral cleft lip/palate (Veau III), left cleft nare, meconium-stained delivery, and mild jaundice not requiring phototherapy.

Past Medical History: Speech delay, intrinsic eczema, gastrocutaneous fistula (resolved), history of cleft lip and palate (resolved), complete left unilateral cleft lip and palate (Veau III) (resolved), history of FTT, feeding difficulties requiring G-tube (resolved and stoma fully healed), history of neonatal respiratory insufficiency (resolved).

Active Problems: Delayed bone age determined by x-ray and growth hormone (GH) deficiency.

PSH:

- Gastrostomy tube placement (17 days old)
- Cleft lip repair (4 months old)
- Bilateral myringotomy tube placement (2 years old)
- Palatoplasty (2 years old)
- Gastrocutaneous fistula closure (6 years old)

FMH: No known family history of chronic medical conditions or congenital disorders.

Active Medications:

- Norditropin FlexPro 15 mg/1.5 mL pen injector
 - o Inject 1.6 mg subcutaneously every Monday - Saturday (off Sunday) for GH replacement therapy

Allergies: NKA, NKDA, NKFA, NKEA.

DIFFERENTIAL DIAGNOSIS

BURN WOUND DDX

Cellulitis of the back (L03.312)

- Pertinent positives:
 - o Recent traumatic skin injury with sacral abrasion/burn following electric scooter accident.
 - o Progressive erythema surrounding the wound.
 - o Moderate to severe pain that has progressively worsened.
 - o Localized tenderness over the sacral region.
 - o Small amount of serous drainage noted on dressing.
 - o Wound culture positive for Group A β -hemolytic *Streptococcus* (*Streptococcus pyogenes*).
 - o Healing burn with evidence of wound conversion/slough.
- Pertinent negatives:
 - o Afebrile (36.4°C).
 - o Well appearing and non-toxic.
 - o No chills, fatigue, or malaise.
 - o No tachypnea.
 - o No rapidly spreading erythema documented.
 - o No purulent drainage or fluctuance.
 - o HSV PCR negative, decreasing likelihood of viral etiology.

Deep partial-thickness contact/friction burn with wound conversion (T21.24XD)

- Pertinent positives:
 - o History of high-energy friction injury from scooter accident.
 - o Sacral wound progressed from abrasion to burn.
 - o Wound conversion documented from previously superficial injury.
 - o Moderate to severe pain that has progressively worsened.
 - o Pain worsened with palpation and movement; nerve endings remain viable.
 - o Moist wound bed.
 - o Adherent yellow-white slough.
 - o Surrounding erythema.
 - o Small amount of dried serous drainage on dressing.

- Recent bacterial colonization/infection with Group A Streptococcus.
- Pertinent negatives:
 - No exposed subcutaneous fat, fascia, muscle, or bone documented.
 - No leathery or dry eschar.
 - No black or charred appearance, no circumferential burn, and no neurovascular compromise.

Full-thickness contact/friction burn with wound conversion (T21.34XD)

- Pertinent positives:
 - History of high-energy friction injury from scooter accident.
 - Worsening wound with conversion following initial superficial injury.
 - Adherent yellow-white slough.
 - Persistent tissue breakdown.
 - Delayed healing.
 - Positive wound culture for Group A Streptococcus.
- Pertinent negatives:
 - Moist wound bed rather than a dry, leathery eschar.
 - Significant pain reported.
 - No white, waxy, brown, or black eschar.
 - No insensate tissue documented or exposed fascia, muscle, tendon, or bone.
 - No evidence of compartment syndrome or neurovascular compromise.

Necrotizing fasciitis (M72.6)

- Pertinent positives:
 - Recent traumatic wound.
 - Group A Streptococcus isolated on wound culture.
 - Progressive pain.
 - Wound deterioration with slough formation.
 - Progressive skin changes.
- Pertinent negatives:
 - Afebrile (36.4°C) and non-toxic appearance.
 - Hemodynamically stable w/ no systemic illness or s/s of sepsis.
 - Alert and active. No altered mental status.
 - No rapidly advancing erythema documented.
 - No crepitus.
 - No bullae or hemorrhagic bullae.
 - No foul-smelling discharge.
 - No rapidly progressive tissue necrosis.

RASH DDX

Miliaria rubra (L74.0)

- Pertinent positives:
 - Erythematous papulovesicular rash.
 - Located on the lower back/sacral area, an occluded area covered by clothing and proximity to dressing covering burn.
 - Developed several days after traumatic injury and continuous bandage use.
 - Vesicles/pustules present.
 - No systemic symptoms.
 - Afebrile and non-toxic appearance.
- Pertinent negatives:
 - Positive wound culture for Group A *Streptococcus* suggests a bacterial process.
 - Rash is adjacent to a burn rather than occurring in multiple heat-exposed areas.
 - Significant underlying tissue injury is present.

Bacterial Folliculitis (L73.8)

- Pertinent positives:
 - Erythematous papulovesicular rash.

- Papules and pustules present.
- Erythematous base.
- Recent skin trauma.
- Occlusive dressing near the area.
- Hot weather during the summer, clothing can become saturated with sweat and stick to skin.
- Positive bacterial culture (*Streptococcus pyogenes*).
- Localized eruption.
- Pertinent negatives:
 - Lesions are not follicular-centered.
 - No widespread involvement.
 - No history of shaving or friction specifically involving hair follicles.

Allergic Contact Dermatitis (L23.1)

- Pertinent positives:
 - Rash developed after prolonged dressing/bandage use.
 - Localized to the area beneath or adjacent to adhesive.
 - Erythematous papulovesicular eruption.
 - New onset several days after injury.
- Pertinent negatives:
 - Denies itching.
 - Positive bacterial culture supports infection rather than allergy.

PHYSICAL EXAMINATION FINDINGS

VITALS	HR: 102 bpm Temp: 36.4°C temporal RR: 21 breaths/min SpO₂: 98% on RA Ht: 134.5 cm (1.32 %ile) Wt: 45.7 kg (66.94 %ile) BMI: 25.26 kg/m ² (96th %ile, Z = 1.71) (based on the CDC's Boys, 2-20 Years BMI-for-age) BP: Deferred d/t age and cc
GENERAL	Alert and well-developed male, short in stature, and in no acute distress. Non-toxic appearing.
HEENT	Normocephalic and atraumatic. Conjunctivae clear. PERRL. External ears normal. Nares patent; nose normal. Oral mucosa moist. Oropharynx clear without erythema or exudate.
NECK	Supple with full ROM.
CARDIAC	RRR. Normal S1/S2. No murmurs, rubs, or gallops. Peripheral pulses 2+ and symmetric.
PULMONARY	Normal respiratory effort without distress, nasal flaring, or retractions. Lungs CTA bilaterally with good air entry. No wheezes, rales, rhonchi, or stridor.
MSK	Full ROM. Tenderness noted over the right clavicular/shoulder region and lower back. Signs of recent injury present.
ABDOMEN	Abdomen soft, non-distended, and non-tender during exam while sitting upright.
GU	Deferred d/t CC.

SKIN	Skin warm and dry. Healing abrasions noted on bilateral elbows and knees. Prior to the removal of the bandage over his wound there was a small amount of dried tan serous drainage noted on the dressing. Deep partial-thickness to full-thickness burn over the lower sacral region with a moist wound bed and areas of adherent yellow-white slough. Erythematous papulovesicular rash superior to the sacral burn with scattered erythematous papules and small vesicles/pustules, some ruptured with white crusting. Surrounding erythema present. Additional healing wounds consistent with recent trauma noted.
NEUROLOGICAL	Alert and oriented for age. No focal neurologic deficits observed.
BEHAVIORAL/MENTAL HEALTH	Mood and affect appropriate. Thought content normal. Cooperative throughout examination. Teary and expressed appropriate responses r/t pain.
DIAGNOSTICS (Labs, imaging, other).	
- HSV PCR: Not detected. - Bacterial aerobic culture: Few <i>Streptococcus pyogenes</i> (Group A, beta-hemolytic) isolated. - Bacterial culture identity: Pending. - Medication provided during visit: Ibuprofen (100 mg/5 mL) oral suspension 400 mg. Given 1x in the clinic for pain	
DIAGNOSIS	
- Cellulitis of the back (L03.312) - Deep partial-thickness contact/friction burn with wound conversion (T21.24XD) - Miliaria rubra (L74.0) - Dressing change or removal, nonsurgical wound (Z48.00)	
MANAGEMENT PLAN	
PLAN: Burn and Infection Management - Burn clinic follow up is the highest priority. The APP reached out to the on-call burn physician, and it was discussed that mom would receive a call from the burn team in the morning to be seen in the clinic. Ciornei et al. (2023) found that older children and adolescents most commonly sustain burns from flame sources (fires and fireworks), hot surfaces, and friction injuries such as hot pavement, which is consistent with I.N.'s mechanism of injury (MOI). Although the wound involves less than 10% of his total body surface area (TBSA) and is classified as a minor burn, its progression is concerning (Ciornei et al., 2023). The wound has converted from an abrasion to a superficial burn and now appears consistent with a deep partial-thickness injury following a high energy scooter friction injury. This places him at increased risk for progression to a full-thickness burn (Ciornei et al., 2023). If re-epithelialization does not occur within 2 to 3 weeks of injury (approximately July 27 to August 3), surgical debridement with possible excision and skin grafting may be necessary (Greenhalgh, 2019). The burn location and I.N.'s comorbid GH deficiency further increase his risk for delayed wound healing (Ciornei et al., 2023). Growth hormone regulates hepatic production of insulin-like growth factor 1 (IGF-1), which is essential for tissue repair. Roberts et al. (2021) found that approximately 60% of wound IGF-1 during the proliferative phase is liver derived. GH stimulates IGF-1 production, promoting fibroblast proliferation, keratinocyte migration, collagen synthesis, laminin production, and angiogenesis (Roberts et al., 2021). Individuals with GH deficiency demonstrate reduced connective tissue collagen deposition, which improves with GH replacement therapy (Bæk et al., 2025). For this reason, adherence to his prescribed Norditropin FlexPro injections is important to optimize wound healing. The upper sacrum and lower back are also difficult areas for wound healing because of constant pressure, friction, movement, and risk of contamination, all of which increase the likelihood of delayed healing and hypertrophic scar formation in a growing child (Greenhalgh, 2019). A recent retrospective cohort study found that Xeroform stick-down dressings are an effective treatment option for pediatric burns (Grauberger et al., 2024). After the wound was cleansed and bacterial cultures were obtained, a Xeroform dressing was applied and covered with a nonadherent secondary dressing to keep the Xeroform clean and securely in place. Burn wounds are highly susceptible to bacterial colonization and secondary infection (Ciornei et al., 2023). <i>Staphylococcus aureus</i> (including MRSA) and <i>Streptococcus pyogenes</i> are among the most common pathogens causing skin and soft tissue infections (SSTIs). Considering the MOI and likely environmental	

contamination from the ground, empiric clindamycin 300 mg by mouth three times daily was prescribed initially while awaiting wound culture results. A pediatric specific quality improvement study by Wiltrakis et al. (2022) identified oral clindamycin as appropriate empiric therapy for outpatient pediatric SSTIs. The wound culture returned the following day and grew a few *Streptococcus pyogenes* (Group A beta hemolytic). Clindamycin is one of the recommended treatment options for *S. pyogenes* according to the Infectious Diseases Society of America (IDSA) guidelines (Stevens et al., 2014). Final susceptibility testing is pending, and antibiotic therapy will be adjusted if indicated.

Papulopustular Rash (Keller et al., 2025) - Miliaria pustulosa is a self-limiting condition that typically resolves within a few days once the source of occlusion is removed. Management includes keeping the area clean, minimizing further occlusion, and using topical antibiotics, such as mupirocin, when needed to prevent secondary bacterial infection. In this case, mupirocin 2% ointment was prescribed to apply to the bilateral buttocks three times daily for 7 days.

Pain Management - If I.N. continues to have significant pain with ambulation or position changes, mom was advised to continue ibuprofen 400 mg by mouth every 6 to 8 hours as needed. Acetaminophen 500 mg by mouth may be alternated every 3 hours as needed so he receives one medication every 3 hours for more consistent pain control. If his pain is not adequately managed with this regimen, mom was instructed to contact the clinic or discuss additional pain management options with the burn clinic.

Non-Pharmacological Interventions - Mom was counseled to use age-appropriate distraction techniques, such as tablet games, videos, or music, during dressing changes to help reduce procedural pain and anxiety (Gillum et al., 2022).

EDUCATION:

Wound Care – It is important to leave the Xeroform dressing in place. It will gradually peel away as the skin heals underneath. Do not pull or pick at it (Grauberger et al., 2024).

- Change only the nonadherent outer dressing if needed using the supplies provided. Avoid placing the medical grade tape on the burn or rash (Keller et al., 2025; Wiltrakis et al., 2022).
- Keep the surrounding skin clean with mild soap and water. Sponge baths only until evaluated by the burn clinic. Do not scrub the burn or soak it in bath water, pools, or hot tubs (Wiltrakis et al., 2022).
- Gently pat the rash dry after washing. Avoid rubbing or creating additional friction (Keller et al., 2025).
- Apply mupirocin 2% ointment only to the rash on the bilateral buttocks three times daily for 7 days. Do not apply it to the burn wound (Keller et al., 2025).
- Do not apply any other creams, ointments, lotions, or home remedies to the burn or rash unless directed by the burn team or PCP (Keller et al., 2025; Wiltrakis et al., 2022).
- If the rash above his burn has not improved within 3 to 5 days, return to the PCP for reevaluation (Keller et al., 2025).

RX and OTC Medication Orders – The following medications are for the infection, helping with healing, and pain management.

- Clindamycin hydrochloride capsules 16 to 20 mg/kg/day divided into 3 or 4 equal doses (Stevens et al., 2014)
 - o Take 1 capsule (300 mg) by mouth three times daily with a full glass of water. Complete the full course as prescribed (10 days). Take with food to reduce stomach upset. If significant diarrhea (more than 3 loose stools per day), bloody stools, or abdominal cramping develops, stop the medication and contact the clinic immediately, as this may indicate *Clostridioides difficile* (*C. diff*) associated diarrhea (Stevens et al., 2014).
- OTC daily multivitamin that contains no more than 1,700 mcg RAE/day of vitamin A, 1,200 mg/day of vitamin C, 4,000 IU/day of vitamin D, and 23 mg/day of zinc (Allen, 2025).
 - o Multivitamins are not covered under the Colorado Medicaid Formulary, but the suggested one for this age group by the Growth and Medical Nutrition Clinic (GMNC) is the Costco brand adult multivitamin (Kirkland Signature Daily Multi).
 - o Take 1 Kirkland Signature Daily Multi every day until the burn wound is healed to help promote and support wound healing (Penny et al., 2022). Can discontinue the multivitamin at that time if I.N. has a well-balanced diet as it is not indicated for use in overall healthy children (Penny et al., 2022).
- OTC ibuprofen weight dose calculation for I.N. is 10 mg/kg per dose every 6–8 hours, with a maximum of 4 doses per day (Ali et al., 2026).

- Take 400 mg (two adult dosed tablets that are 200 mg each) every 6–8 hours as needed for pain. Always take with food.
- This falls under the prescription maximum dose of 3200 mg/day (Ali et al., 2026).
- OTC acetaminophen weight-based dosing is 10–15 mg/kg per dose every 4–6 hours (Cooper et al., 2017).
 - Take 500 mg (one adult 500 mg tablet) every 4–6 hours as needed for pain. Do not exceed the maximum daily dose of 3,427.5 mg/day (Cooper et al., 2017).
- If pain is severe and not managed by ibuprofen alone can alternate with acetaminophen.
 - For example, take 400 mg ibuprofen then 3 hours later take 500 mg acetaminophen, then 3 hours later take 400 mg ibuprofen, and so on.
- Continue Norditropin FlexPro 1.6 mg subcutaneously every Monday through Saturday as prescribed by I.N.'s endocrinologist. Avoid injecting near the burn, rash, or other abrasions on the skin.

Nutrition – Adequate nutrition with a well-balanced diet and increased water intake is imperative during the healing process.

- Encourage a high protein, well-balanced diet, and begin taking the suggested daily multivitamin that contains vitamins A, C, D, and zinc to support wound healing (Chu et al., 2024; Penny et al., 2022).
- Maintain adequate hydration to promote the inflammatory response, wound strength, and collagen synthesis (Grada & Phillips, 2022).

ADLs and Comfort Strategies - Engage in activities as tolerated, but refrain from running, contact sports, bicycle or scooter riding, other activities that increase pain or friction, and that increase the risk of additional injuries, until the burn has healed (Greenhalgh, 2019).

- When resting, lie on the side or stomach, when possible, to reduce pressure on the sacral wound. Avoid prolonged sitting directly on the wound. A pressure-relieving cushion, such as the newer designed Boppy Nursing Pillow, may improve comfort.
- Wear loose fitting, breathable cotton clothing. Avoid tight waistbands, synthetic fabrics, and anything that traps heat or moisture. It is acceptable to avoid wearing underwear temporarily to minimize friction and pressure on the burn and rash (Greenhalgh, 2019; Keller et al., 2025).
- Do not swim, soak in baths, or use hot tubs until the wound is fully healed and cleared by the burn team or PCP (Greenhalgh, 2019; Keller et al., 2025).

Sun protection - After the wound has healed, protect the scar from sun exposure for at least 12 to 18 months. Apply a broad-spectrum sunscreen with SPF 30 or higher whenever the area is exposed to sunlight and reapply every 2 hours (Wang et al., 2026).

Emotional and Physiological Support - Burn injuries increase the risk of post-traumatic stress symptoms in children (Ciornei et al., 2023). Reassure I.N. that feeling scared, frustrated, or anxious after a traumatic injury is normal. Encourage open conversations about his feelings and maintain normal routines when possible.

- Contact the PCP if persistent anxiety, nightmares, mood changes, withdrawal, or behavioral changes develop, as referral to a pediatric mental health professional may be appropriate (Ciornei et al., 2023).
- Caregivers should also seek support if feeling overwhelmed, as caregiver well-being is important to a child's recovery (Cioga et al., 2024).

E-Scooter Safety (Howard et al., 2026) - E-scooter injuries in children and adolescents continue to increase and can result in serious injuries, including fractures, concussions, and traumatic brain injuries. Children ages 11 to 14 years are at the highest risk.

- To help prevent injuries:
 - Always wear a properly fitted helmet.
 - Ride in low traffic areas and avoid riding in the street whenever possible.
 - Only one rider per scooter.
 - Use age-appropriate scooters with speed limiting features when available.
 - Children under 14 years should be closely supervised while riding.
 - Wrist guards, elbow pads, and knee pads can provide additional protection.
- Seek immediate medical care if your child has a head injury, loss of consciousness, confusion, vomiting, unusual sleepiness, severe pain or swelling, inability to move an arm or leg, or a wound that will not stop bleeding.

- E-scooters are motorized vehicles, not toys. Practicing safe riding habits and wearing a helmet every ride are the best ways to reduce the risk of serious injury.

Return Precautions (Williams & Lee, 2021) - Mom was instructed to seek immediate medical evaluation if I.N. develops:

- Fever of 38°C (100.4°F) or higher.
- Increasing redness, warmth, swelling, or red streaking around the wound.
- Purulent drainage or a foul odor from the wound.
- Worsening pain not relieved with ibuprofen or acetaminophen.
- Lethargy, poor oral intake, or appears generally ill.
- Worsening or spreading rash despite treatment.
- Significant diarrhea, bloody stools, or severe abdominal cramping while taking clindamycin.

FOLLOW-UP:

7/22 - Burn team to contact family to schedule burn clinic appointment.

7/23 - Follow-up with the clinic as scheduled to reassess wound, rash, and response to antibiotics. If the family has not been contacted by the burn clinic, they should call the clinic directly, phone number was provided in the After Visit Summary. The APP will also assist with communication or contact the on-call burn provider if needed. Timely burn evaluation is critical because the window for surgical intervention narrows significantly as the wound approaches 3 weeks without healing, increasing the risk of permanent scarring (Greenhalgh, 2019).

- If access to the burn clinic is delayed, continue close follow up in the PCP clinic (Greenhalgh, 2019):
 - o 7/25-7/27 (Day 12-14 post-injury) - Repeat wound assessment within 2 to 3 days of the 7/23 visit. Any wound that remains open at 2 weeks should be evaluated by a burn specialist to determine whether skin grafting is indicated. If burn clinic access remains unavailable, escalate through the referring provider, PCP, or emergency department to ensure timely burn surgery evaluation.
 - o 7/28-8/3 (Day 15-21 post-injury) - This is the critical decision window. If the wound is not demonstrating clear re-epithelialization, evaluation by a burn surgeon is recommended. If the family is still unable to access burn care, referral to the emergency department for burn surgery consultation is warranted, as delays beyond 3 weeks substantially increase the risk of hypertrophic scarring and secondary infections (Greenhalgh, 2019).

Continue routine primary care visits per well-child schedule, including monitoring of growth hormone therapy and growth parameters (Hagan et al., 2017).

CONSULTATION WITH PRECEPTOR

We discussed and agreed that the primary concern is the upper sacral/lower back wound, which has progressed from an abrasion to a burn with wound conversion as evidenced by the previously documented superficial injury. Although the new papulovesicular rash warrants evaluation, it is considered secondary to the burn due to concern for burn progression and bacterial infection.

While the initial bandage from home was on the burn it was evaluated and it was determined that the dressing had adhered to the wound. We then discussed a plan for making the dressing removal as atraumatic as possible for I.N. given he was already in pain. Our plan included adhesive remover for the band aids and soaking the adherent gauze dressing with sterile normal saline to loosen it from the wound prior to removing the dressing to minimize additional tissue injury and increasing the patient's discomfort.

After visualizing and assessing the burn and determining it had wound conversion, treatment options were discussed. This included wound cleansing, appropriate burn dressings, pain management, initiation of empiric antibiotic therapy while waiting for the HSV PCR and bacterial culture results, then the bacterial culture sensitivity (if indicated). We then discussed if a referral to a pediatric burn specialist was warranted for further evaluation and management.

CODING/BILLING

99214 - PR OFFICE/OUTPATIENT ESTABLISHED MOD MDM 30 MIN

87529 - HSV PCR

87070 - BACTERIAL AEROBIC CULTURE

87077 - BACTERIAL CULTURE IDENTITY

REFERENCES

- Ali, S., Klassen, T. P., Candelaria, P., Bhatt, M., Sawyer, S., Stang, A., Yaskina, M., Heath, A., Pechlivanoglou, P., Offringa, M., Drendel, A. L., Hickes, S., Poonai, N., & KidsCAN PERC Innovative Pediatric Clinical Trials No OUCH Study Team. (2026). Acetaminophen (paracetamol) or opioid analgesia added to ibuprofen for children's musculoskeletal injury: Two randomized clinical trials. *JAMA*, 335(10), 863–873. <https://doi.org/10.1001/jama.2025.25033>
- Allen L. H. (2025). Micronutrients - Assessment, requirements, deficiencies, and interventions. *The New England journal of medicine*, 392(10), 1006–1016. <https://doi.org/10.1056/NEJMr2314150>
- Bæk, A., Pedersen, A. K. N., Billeskov, T. B., Dollerup, O. L., Arlien-Søborg, M. C., Jessen, N., Bjerre, M., & Jørgensen, J. O. L. (2025). GH replacement therapy in adults stimulates fibroblast activation protein- α activity. *European Journal of Endocrinology*, 193(6), 659–666. <https://doi.org/10.1093/ejendo/lvaf244>
- Chu, A. S., Delmore, B., & Chiu, E. S. (2024). High-quality dietary protein: The key to healthy granulation tissue. *Advances in Skin & Wound Care*, 37(10), 520–527. <https://doi.org/10.1097/ASW.0000000000000210>
- Cioga, E., Cruz, D., & Laranjeira, C. (2024). Parental adjustment to a burn-injured child: How to support their needs in the aftermath of the injury. *Frontiers in Psychology*, 15, 1456671. <https://doi.org/10.3389/fpsyg.2024.1456671>
- Ciornei, B., David, V. L., Popescu, D., & Boia, E. S. (2023). Pain management in pediatric burns: A review of the science behind it. *Global Health, Epidemiology and Genomics*, 2023, 9950870. <https://doi.org/10.1155/2023/9950870>
- Cooper, T. E., Fisher, E., Anderson, B., Wilkinson, N. M., Williams, D. G., & Eccleston, C. (2017). Paracetamol (acetaminophen) for chronic non-cancer pain in children and adolescents. *Cochrane Database of Systematic Reviews*, 2017(8), Article CD012539. <https://doi.org/10.1002/14651858.CD012539.pub2>
- Gillum, M., Huang, S., Kuromaru, Y., Dang, J., Yenikomshian, H. A., & Gillenwater, T. J. (2022). Nonpharmacologic management of procedural pain in pediatric burn patients: A systematic review of randomized controlled trials. *Journal of Burn Care & Research*, 43(2), 368–373. <https://doi.org/10.1093/jbcr/irab167>
- Grada, A., & Phillips, T. J. (2022). Nutrition and cutaneous wound healing. *Clinics in Dermatology*, 40(2), 103–113. <https://doi.org/10.1016/j.clindermatol.2021.10.002>

- Grauberger, J. N., Joshi, N., Joo, A., Phelan, A. L., & Lalikos, J. F. (2024). Xeroform stick-down dressing: A novel treatment for pediatric partial-thickness burns. *Annals of Plastic Surgery*, 92(4 Suppl. 2), S123–S128. <https://doi.org/10.1097/SAP.0000000000003795>
- Greenhalgh, D. G. (2019). Management of burns. *The New England Journal of Medicine*, 380(24), 2349–2359. <https://doi.org/10.1056/NEJMra1807442>
- Hagan, J. F., Shaw, J. S., Duncan, P. M., & American Academy of Pediatrics. (2017). *Bright futures: Guidelines for health supervision of infants, children, and adolescents* (4th ed.; J. F. Hagan, J. S. Shaw, & P. M. Duncan, Eds.). American Academy of Pediatrics.
- Howard, M. B., Prichett, L., & Cohen, J. S. (2026). Disparities in incidence and severity of electric scooter injuries in children. *Injury*, 57(6), 113175. <https://doi.org/10.1016/j.injury.2026.113175>
- Keller Goff, G., Stein, S. L., & Rosenblatt, A. E. (2025). Neonatal miliaria pustulosa: A case series. *Pediatric Dermatology*, 42(2), 278–283. <https://doi.org/10.1111/pde.15817>
- Penny, H., Flores, R., Pennington, E., Pedersen, A., & Tran, S. (2022). The role of macronutrients and micronutrients in wound healing: A narrative review. *Journal of Wound Care*, 31(Suppl. 5), S14–S22. <https://doi.org/10.12968/jowc.2022.31.Sup5.S14>
- Roberts, R. E., Cavalcante-Silva, J., Kineman, R. D., & Koh, T. J. (2021). Liver is a primary source of insulin-like growth factor-1 in skin wound healing. *The Journal of Endocrinology*, 252(1), 59–70. <https://doi.org/10.1530/JOE-21-0298>
- Stevens, D. L., Bisno, A. L., Chambers, H. F., Dellinger, E. P., Goldstein, E. J. C., Gorbach, S. L., Hirschmann, J. V., Kaplan, S. L., Montoya, J. G., Wade, J. C., & Infectious Diseases Society of America. (2014). Practice guidelines for the diagnosis and management of skin and soft tissue infections: 2014 update by the Infectious Diseases Society of America. *Clinical Infectious Diseases*, 59(2), e10–e52. <https://doi.org/10.1093/cid/ciu444>
- Wang, S., Johnson, D., Flores, E., Celie, K. B., Lee, K. H., Gillenwater, J., Johnson, M. B., & Yenikomshian, H. A. (2026). A gap in knowledge: Patient perspectives and barriers to sunscreen use after burn injury. *Journal of Burn Care & Research*. Advance online publication. <https://doi.org/10.1093/jbcr/irag093>
- Williams, F. N., & Lee, J. O. (2021). Pediatric burn infection. *Surgical Infections*, 22(1), 54–57. <https://doi.org/10.1089/sur.2020.218>

Wiltrakis, S. M., Jaggi, P., Lu, L., & Jain, S. (2022). Optimizing antibiotic treatment of skin infections in pediatric emergency and urgent care centers. *Pediatrics*, 150(4), e2021053197. <https://doi.org/10.1542/peds.2021-053197>