

N431 Care Plan #2

Lakeview College of Nursing

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10/13/2019

Demographics (3 points)

| | | | |
|------------------------------------|-------------------------------|-----------------------------|--------------------------|
| Date of Admission 10/7 | Patient Initials AM | Age 31 | Gender F |
| Race/Ethnicity Caucasian | Occupation Nurse | Marital Status NM | Allergies None |
| Code Status full | Height 5'4 | Weight 136 lbs | |

Medical History (5 Points)

Past Medical History: carcinoma, cervical cancer

Past Surgical History: hysterectomy, bladder repair

Family History: no family history of issues

Social History (tobacco/alcohol/drugs): none

Assistive Devices: none

Living Situation: lives with boyfriend

Education Level: Bachelor's degree in nursing

Admission Assessment

Chief Complaint (2 points): facial swelling

History of present Illness (10 points): patient presents to ER on 10/7 for right side lower facial swelling, patient noticed when woke up that morning and denies any bug bite, fever, or injury. Prescribed antibiotics and took full course of meds and swelling then came back, denies chest pain, nausea, vomiting when patient came back.

Primary Diagnosis

Primary Diagnosis on Admission (2 points): facial cellulitis

Secondary Diagnosis (if applicable): none

Pathophysiology of the Disease, APA format (20 points): Cellulitis is a bacterial infection caused by a break in the skin that allows the bacteria to enter causing redness and swelling. The most common are strep pneumoniae and staph aureus. Symptoms include tenderness, swelling, warmth, bruising, fever, headache, weakness. This infection can be treated with rest, antibiotics, IV fluids, wet dressing applications, and sometimes surgery. To help prevent cellulitis it is highly recommended people practice good hygiene skills like showering regularly and washing hands as well as applying lotions to cracked skin. It is important to see your provider sooner than later to prevent the infection from going into the tissues and causing further damage to the blood which can result to amputation or even death.

Pathophysiology References (2) (APA):

Cellulitis. (n.d.). Retrieved October 13, 2019, from <https://www.hopkinsmedicine.org/health/conditions-and-diseases/cellulitis>.

Laboratory Data (15 points)

CBC Highlight All Abnormal Labs—Explanations must be in complete sentences and contain in-text citations in APA format.

| Lab | Normal Range | Admission Value | Today's Value | Reason for Abnormal Value |
|-------------|--------------|-----------------|---------------|-------------------------------|
| RBC | 3.8-5.3 | 3.9 | 3.8 | |
| Hgb | 12-15.8 | 13 | 13.5 | |
| Hct | 36-47 | 36 | 36 | |
| Platelets | 140-440 | 200 | 200 | |
| WBC | 4-12 | 6 | 7 | |
| Neutrophils | 47-73 | 47 | 47 | |
| Lymphocytes | 18-42 | 13 | 15 | Patient's lab was low because |

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|--------------------|------|-----|-----|---|
| | | | | patient is on Keflex (Hinkle & Cheever, 2018). |
| Monocytes | 4-12 | 5 | 5 | |
| Eosinophils | 0-5 | 8.2 | 5.5 | Patient had pain and burning sensation on chin from bacterial cellulitis, wbc were fighting off infection (Hinkle & Cheever, 2018). |
| Bands | n/a | n/a | n/a | |

Chemistry **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

| Lab | Normal Range | Admission Value | Today's Value | Reason For Abnormal |
|------------|--------------|-----------------|---------------|--|
| Na- | 133-144 | 137 | 137 | |
| K+ | 3.5-5.1 | 3.8 | 3.8 | |
| Cl- | 98-107 | 107 | 107 | |
| CO2 | 21-31 | 25 | 25 | |
| Glucose | 70-99 | 114 | 101 | “High blood sugar can lead to cellulitis in patients or skin breakdown” (Cellulitis & Diabetes, 2014). |
| BUN | 7-25 | 8 | 8 | |
| Creatinine | .5-1.0 | .7 | .7 | |
| Albumin | 3.5-5.7 | 3.9 | 3.9 | |
| Calcium | 8.8-10.2 | 8.8 | 8.9 | |
| Mag | 1.9-2.5 | 2.0 | 2.0 | |
| Phosphate | 2.5-4.5 | 2.9 | 2.9 | |

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|--------------------|----------------|------------|------------|--|
| Bilirubin | 0.2-0.8 | .5 | .5 | |
| Alk Phos | 34-104 | 67 | 68 | |
| AST | 13-39 | 17 | 17 | |
| ALT | 7-52 | 40 | 40 | |
| Amylase | 23-85 | 34 | n/a | |
| Lipase | 0-160 | 28 | n/a | |
| Lactic Acid | 140-280 | 160 | n/a | |
| Troponin | <0.4 | .12 | n/a | |
| CK-MB | <12 | 6 | n/a | |
| Total CK | 30-200 | 70 | n/a | |

Other Tests **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

| Lab Test | Normal Range | Value on Admission | Today's Value | Reason for Abnormal |
|--------------------|---------------------|---------------------------|----------------------|----------------------------|
| INR | 2-3 | 2.5 | 2.5 | |
| PT | 11-13 | 12 | 13 | |
| PTT | 25-36 | 25 | 25 | |
| D-Dimer | <250 | 176 | 175 | |
| BNP | 0-99 | 45 | 49 | |
| HDL | 60 | 60 | 60 | |
| LDL | 60-130 | 67 | 71 | |
| Cholesterol | <200 | 167 | 170 | |

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|---------------|-------|-----|-----|--|
| Triglycerides | <150 | 130 | 130 | |
| Hgb A1c | 4-6.5 | 4.4 | 4.4 | |
| TSH | .4-4 | .8 | .9 | |

Urinalysis **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

| Lab Test | Normal Range | Value on Admission | Today's Value | Reason for Abnormal |
|------------------|------------------|--------------------|------------------|---------------------|
| Color & Clarity | Yellow and clear | Yellow and clear | Yellow and clear | |
| pH | 2.3-6.6 | 2.6 | 2.7 | |
| Specific Gravity | 1.015-1.025 | 1.02 | 1.02 | |
| Glucose | Neg | neg | Neg | |
| Protein | Neg | neg | Neg | |
| Ketones | Neg | neg | Neg | |
| WBC | <5 | 4 | 4 | |
| RBC | <5 | 4 | 4 | |
| Leukoesterase | absent | absent | Absent | |

Arterial Blood Gas **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

| Test | Normal Range | Value on Admission | Today's Value | Explanation of Findings |
|-------|--------------|--------------------|---------------|-------------------------|
| pH | 7.35 | 7.36 | 7.37 | |
| PaO2 | >90 | 70 | 70 | |
| PaCO2 | 35-45 | 37 | 36 | |
| HCO3 | 22-26 | 25 | 25 | |
| SaO2 | 95-100 | 100 | 100 | |

Cultures **Highlight All Abnormal Labs**—Explanations must be in complete sentences and contain in-text citations in APA format.

| Test | Normal Range | Value on Admission | Today's Value | Explanation of Findings |
|----------------|--------------|--------------------|---------------|-------------------------|
| Urine Culture | Neg | neg | Neg | |
| Blood Culture | Neg | neg | Neg | |
| Sputum Culture | Neg | neg | Neg | |
| Stool Culture | Neg | neg | neg | |

Lab Correlations Reference (APA): *Hinkle, J. L., & Cheever, K. H. (2018). Brunner & Suddarth's textbook of medical/surgical nursing. (14th. ed.). Philadelphia, PA*

Schneider, C. (2014, June 23). Cellulitis DiabetesCarenet. Retrieved from <http://www.diabetescare.net/authors/clara-schneider/cellulitis-and-diabetes>

Diagnostic Imaging

All Other Diagnostic Tests (5 points): no imaging, culture taken in ER

Diagnostic Test Correlation (5 points): culture showed diagnosis of facial cellulitis

Diagnostic Test Reference (APA):

Use of Blood Cultures in Patients with Cellulitis. (2000, April 15). Retrieved from <https://www.aafp.org/afp/2000/0415/p2517.html>.

Current Medications (10 points, 1 point per completed med)

10 different medications must be completed

Home Medications (5 required)

| | | | | | |
|---|--|---|---|--|---|
| Brand/ Generic | Keflex/ cephalexin | Parafon forte/ chlorzoxazone | Flexeril/ cyclobenzaprin e | Bactrim/ sulfamet hoxazole | Tylenol/ acetaminophen |
| Dose | 500 mg | 500mg | 10mg | 800mg | 650mg |
| Frequen cy | 4x day | nightly | 3x day prn | 2x day | prn |
| Route | oral | Oral | Oral | oral | oral |
| Classific ation | cephalosporin | Skeletal muscle relaxer | Muscle relaxant | Antiprot ozoal | anti- inflammatory |
| Mechani sm of Action | Binds to cell membranes causing cell death | Suppresses CNS system | Reduces tonic muscle activity | Inhibits folic acid in bacteria | Inhibits prostaglandins |
| Reason Client Taking | Treat skin infection on chin | Reduces her muscle spasms | Reduces patient’s muscle spasms | Takes it for wound infection | Reduce inflammation and pain with cellulitis |
| Contrain dications (2) | Penicillin allergies and caution for renal disease patients | Porphyria and caution in cardiac disorders | Cardiac disorders and hyperthyroidis m | Hx of thrombo cytopeni a and renal diseases | Alcohol products and liver disease |
| Side Effects/ Adverse Reaction s (2) | Seizures, rashes | Dizzy, and bleeding | Fatigue and nausea | Hyperkal emia and insomnia | Agitation and anxiety |
| Nursing Consider ations (2) | Obtain cultures and assess for infections signs | Make sure muscles are relaxed after meds are given | Assess muscle stiffness and assess range of motion | Monitor bowels and may cause hypoglyc emia | Acetylcysteine is the antidote and may alter blood glucose |
| Key Nursing Assessm ent(s)/La | May increase AST labs and monitor bowels | Assess for pain and assess ROM check labs like plt and wbc | Assess mental changes and tachycardia check plt labs | Assess rash monitor wbc and | Monitor hepatic labs, assess for redness and |

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|---|---|---|--|---|--|
| b(s) Prior to Adminis- tration | | | prior | obtain culture | pain |
| Client Teachin- g needs (2) | Take meds around clock and monitor for superinfections | Take as directed and meds may cause drowsiness | Take as directed and avoid current use with alcohol | Call provider if rash worsens and take full course of meds | Avoid alcohol and med may cause blood glucose changes |

Hospital Medications (5 required)

| | | | | | |
|------------------------------|---|--|-----------------------------------|--|----------------------------------|
| Brand/Generic | Zosyn/ piperacillin | Vancomycin/ vancocin | Tylenol/ acetaminophen | Rocephin/ ceftriaxone | Nicoderm/ m/ |
| Dose | 3.375g | 1250mg | 650mg | 1g | 1 patch |
| Frequency | Q6hr | Q8hr | Prn | daily | daily |
| Route | IV | IV | oral | injection | On skin |
| Classification | Anti-infective | Anti-infective | Anti-inflamm | Anti-infective | Smoking deterrent |
| Mechanism of Action | Binds to bacteria cell wall causing cell death | Binds to bacteria cell wall causing death | Inhibits prostaglandins | Binds to cell wall causing cell death | Provides nicotine to body |
| Reason Client Taking | For patient's skin infection | Treat infection on chin | Reduce redness and pain | Treat skin infection | For nicotine withdrawal |
| Contraindications (2) | Penicillin allergy, and renal | Renal impairment and | Alcohol and liver disease | Cephalosporin allergy and GI | Hx of MI and worsenin |

| | | | | | |
|---|--|---|---|---|---|
| | impairment | intestinal inflammation | | disease | g angina |
| Side Effects/Adverse Reactions (2) | Seizures, lethargy | Ototoxicity and nausea | Agitation and anxiety | Seizures, rashes | Dizzy and abnormal dreams |
| Nursing Considerations (2) | Don't run with vancomycin together and observe signs of allergies | Trough shouldn't exceed 10mcg/ml and monitor superinfections | Acetylcysteine is the antidote and may alter blood glucose | Med is not cefazolin and patient may develop diarrhea | Assess signs of withdrawal and assess progress of cessation |
| Key Nursing Assessment(s)/Lab(s) Prior to Administration | Cbc and renal labs, assess skin reactions and assess bowels | Cbc and albumin, assess infection and monitor IV site | Monitor hepatic labs, assess for redness and pain | Monitor wbc and assess for infections, and obtain skin infection culture | Assess smoking hx and patch should be taken off after 24 hours |
| Client Teaching needs (2) | Notify provider if diarrhea occurs and report infection worsening | Caution rheumatic heart disease and take meds as directed | Avoid alcohol and med may cause blood glucose changes | Report signs of superinfection and report any diarrhea to provider | Encourage smoking cessation program and emphasize regular visits with doctor |

Medications Reference (APA):

Up-to-Date Drug Information. (n.d.). Retrieved October 13, 2019, from

<https://www.drugguide.com/ddo/>.

Assessment

Physical Exam (18 points)

| | |
|---|--|
| <p>GENERAL (1 point): Alertness: alert and oriented Orientation: awake Distress: moderate pain 3/10 Overall appearance: well groomed, cooperative with daily care, skin dry and free of bruising and rashes except for cellulitis on chin</p> | |
| <p>INTEGUMENTARY (2 points): Skin color: white Character: dry Temperature: warm, 97.4 F Turgor: rapid recoil Rashes: chin Bruises: chin Wounds: chin Braden Score: 21 Drains present: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:</p> | |
| <p>HEENT (1 point): Head/Neck: no dirt or rashes, clean and dry Ears: no discharge or ear wax Eyes: PERRLA Nose: septum midline and nose symmetrical Teeth: white and intact</p> | |
| <p>CARDIOVASCULAR (2 points): Heart sounds: s1 and s2 heard S1, S2, S3, S4, murmur etc. Cardiac rhythm (if applicable): regular rhythm</p> | |

| | |
|---|--|
| <p>Peripheral Pulses: +2 Capillary refill: rapid recoil Neck Vein Distention: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Edema Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Location of Edema:</p> | |
| <p>RESPIRATORY (2 points): Accessory muscle use: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Breath Sounds: Location, character No wheezing, crackles, or rhonchi</p> | |
| <p>GASTROINTESTINAL (2 points): Diet at home: regular Current Diet regular diet Height: 5'4 Weight: 136 lbs Auscultation Bowel sounds: present Last BM: day of care 10/9 Palpation: Pain, Mass etc.: none Inspection: chin swelling and broken down skin Distention: none Incisions: chin Scars: none Drains: none Wounds: chin Ostomy: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Nasogastric: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Size: Feeding tubes/PEG tube Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type:</p> | |
| <p>GENITOURINARY (2 Points): Color: yellow Character: clear Quantity of urine: 240 ml output Pain with urination: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Dialysis: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Inspection of genitals: Catheter: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Type: Size:</p> | |
| <p>MUSCULOSKELETAL (2 points): Neurovascular status: ROM: MAEW Supportive devices: none</p> | |

| | |
|---|--|
| <p>Strength: bilateral equal strength ADL Assistance: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Fall Risk: Y <input type="checkbox"/> N <input checked="" type="checkbox"/> Fall Score: n/a Activity/Mobility Status: no assistance needed Independent (up ad lib): yes <input type="checkbox"/> Needs assistance with equipment: no <input type="checkbox"/> Needs support to stand and walk: no <input type="checkbox"/></p> | |
| <p>NEUROLOGICAL (2 points): MAEW: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> PERLA: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> Strength Equal: Y <input checked="" type="checkbox"/> N <input type="checkbox"/> if no - Legs <input type="checkbox"/> Arms <input type="checkbox"/> Both <input type="checkbox"/> Orientation: alert and oriented to date and time as well as where she is at Mental Status: normal for age group Speech: strong vocabulary Sensory: normal LOC: awake</p> | |
| <p>PSYCHOSOCIAL/CULTURAL (2 points): Coping method(s): spending time with boyfriend and daughter Developmental level: nursing degree Religion & what it means to pt.: n/a Personal/Family Data (Think about home environment, family structure, and available family support): boyfriend and parents are present in her life and able to care for her if she needs it</p> | |

Vital Signs, 2 sets (5 points)

| Time | Pulse | B/P | Resp Rate | Temp | Oxygen |
|----------|-------|--------|-----------|------|--------|
| 8:00 am | 77 | 120/79 | 18 | 97.4 | 100 |
| 11:00 am | 80 | 118/75 | 18 | 97.4 | 100 |

Vital Sign Trends:

Mostly the exact same, patient didn't have any major medical complications that would be noted for vitals varying during the day.

Pain Assessment, 2 sets (2 points)

| Time | Scale | Location | Severity | Characteristics | Interventions |
|--------------|--------------|-----------------|-----------------|------------------------|----------------------|
| 8:00 | 3 | chin | moderate | dull | Tylenol |
| 11:00 | 3 | Chin | moderate | dull | Tylenol |

IV Assessment (2 Points)

| IV Assessment | Fluid Type/Rate or Saline Lock |
|--|---------------------------------------|
| Size of IV: 20 g Location of IV: median cubital vein Date on IV: 10/6 Patency of IV: correctly placed and no blockage Signs of erythema, drainage, etc.: none IV dressing assessment: dressed the IV for vanco and put new IV dressing on zosyn | Zosyn 3.375 g Q6hr |

Intake and Output (2 points)

| Intake (in mL) | Output (in mL) |
|-----------------------|-----------------------|
| 240 ml | 240ml |

Nursing Care

Summary of Care (2 points):

Overview of care: took patients vitals, started IV Zosyn and vancomycin ran through different IV lines through the right wrist and antecubital vein. Auscultated heart and lungs for any crackles or abnormal heart patterns. Administered other meds including Tylenol, assed the cellulitis for drainage and any pain.

Procedures/testing done: she had an incision and drainage done prior to care in the ER

Complaints/Issues: moderate pain that was managed with Tylenol. Initiated an IV line 4 separate times due to no blood return, possibly from patient being dehydrated.

Vital signs (stable/unstable): stable

Tolerating diet, activity, etc.: tolerating diet, was able to have anything on the menu

Physician notifications: physician wanted to cut open the cellulitis to drain it in the afternoon

Future plans for patient: healthy diet consisting of protein and vegetables

Discharge Planning (2 points)

Discharge location: meg surg floor

Home health needs (if applicable): none

Equipment needs (if applicable): none

Follow up plan: eat healthy diet to keep skin smooth

Education needs: educate on the bacterial infection as to how to maintain and avoid the infection.

Nursing Diagnosis (15 points)

Must be NANDA approved nursing diagnosis and listed in order of priority

| Nursing Diagnosis <ul style="list-style-type: none"> Include full nursing diagnosis with “related to” and “as evidenced by” components | Rational <ul style="list-style-type: none"> Explain why the nursing diagnosis was chosen | Intervention (2 per dx) | Evaluation <ul style="list-style-type: none"> How did the patient/family respond to the nurse’s actions? <ul style="list-style-type: none"> Client response, status of goals and outcomes, modifications to plan. |
|--|--|---|---|
| 1. Risk for acute pain due to nerve pain, irritation and headache as evidenced by | Patient had no headache at ER but upon daily care for clinical she had moderate pain | 1. Administer Tylenol 2. Use 1-10 pain scale and | Patient cooperated and took medication, allowed the nurse to poke her multiple attempts to start IV for vanco and Zosyn |

| | | | |
|---|---|---|---|
| <p>pain scale 3/10</p> | <p>in the head and chin area.</p> | <p>observe for facial changes and grimacing</p> | |
| <p>2. Risk for impaired skin integrity related to breakdown on the chin that had moved to upper neck area as evidenced by spreading since morning care</p> | <p>The cellulitis had moved downward since the start of morning care and had not gotten better as there was a knot progressing under the chin</p> | <p>1. administered vanco and Zosyn to help treat the bacterial infection</p> <p>3. Had the doctor come take a look at the cellulitis spreading</p> | <p>Client willing to let the doctor cut and drain the incision. Boyfriend willing support her during the process that would occur in the afternoon</p> |
| <p>4. Risk for anxiety due to not enough knowledge about the disease as evidenced by patient not knowing what was wrong until admitted on the meg surg floor</p> | <p>Patient had antibiotics and came back after not getting better, patient was concerned about what it was and how to help treat it on her own before admitted</p> | <p>1. Share with patient that cellulitis is a bacterial infection and educate on antibiotics to help treat</p> <p>2 educate ways to prevent such as hand wash and lotions on skin breakdown</p> | <p>Patient willing to take better precautions after discharge and boyfriend willing to help with any issues</p> |
| <p>5. Risk for disturbed body image due to skin swelling and breakdown on skin as evidenced by no progression with medication</p> | <p>This was chosen because patient took full course of meds after ER visit and there was no progression, and on day of care the infection was getting bigger and spreading</p> | <p>1. Start IV zosyn and vancomycin</p> <p>2. assess the site and call doctor for second opinion on steps to take for new treatment</p> | <p>Patient allowed nurse to attempt IV pokes multiple times to start medications and the patient complied with the doctors assessment and new orders</p> |

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Other References (APA): none

Concept Map (20 Points):

Subjective Data

Pain 3/10
Patient agitated with needle pokes but complied
Patient felt light headed

Nursing Diagnosis/Outcomes

Risk for acute pain due to nerve pain, irritation and headache as evidenced by pain scale 3/10. Outcome patient stated pain levels subsided
Risk for impaired skin integrity related to breakdown on the chin that had moved to upper neck area as evidenced by spreading since morning care. Outcome patient would have drainage again in afternoon done by the doctor
Risk for anxiety due to not enough knowledge about the disease as evidenced by patient not knowing what was wrong until admitted on the meg surg floor. Patient outcome displayed she knew how to manage and prevent facial cellulitis along with causes
Risk for disturbed body image due to skin swelling and breakdown on skin as evidenced by no progression with medication, outcome showed no progress with daily care and doctor ordered to drain the incision scheduled for the afternoon

Objective Data

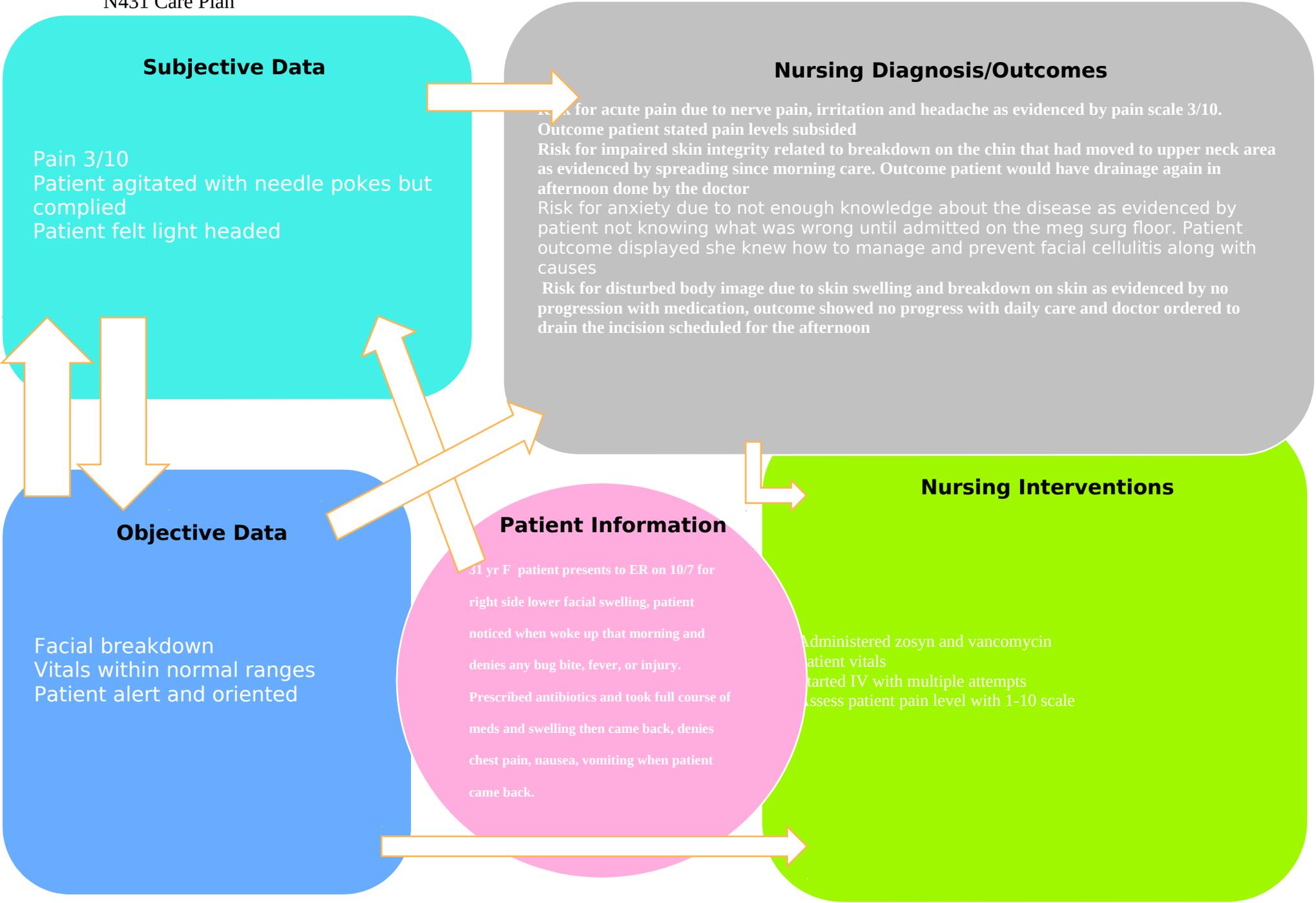
Facial breakdown
Vitals within normal ranges
Patient alert and oriented

Patient Information

31 yr F patient presents to ER on 10/7 for right side lower facial swelling, patient noticed when woke up that morning and denies any bug bite, fever, or injury. Prescribed antibiotics and took full course of meds and swelling then came back, denies chest pain, nausea, vomiting when patient came back.

Nursing Interventions

Administered zosyn and vancomycin
checked patient vitals
started IV with multiple attempts
assess patient pain level with 1-10 scale



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