CIRCUMCISION

Circumcision is a surgical procedure in which the prepuce (foreskin) of the penis is separated from the glans, and a portion is excised. This elective procedure is performed in the United States based on parental choice for reasons related to hygiene, religion, tradition, social norms, and culture. It is usually performed at 12–24 hr of age or when the infant is considered physically stable. Frequency of this procedure has declined in recent years to approximately 62%.

NEONATAL ASSESSMENT DATA BASE

Circulation

Vital signs WNL, no signs of cold stress
Administration of vitamin K

Food/Fluid

Weight at least 2500 g (5 lb 8 oz)

Safety

Temperature WNL
Free of congenital anomalies; no family history of bleeding disorders or history of "proud flesh" scar formation (especially in black families)

Sexuality

Infant full-term (based on Dubowitz criteria)
Genitalia normal, with no evidence of hypospadias or epispadias; testes descended, and scrotal sac free of hydrocele; prepuce, still developing at birth, normally nonretractable

DIAGNOSTIC STUDIES

CBC: Rules out presence of anemia.
Clotting Studies: Identify coagulation problems.

NURSING PRIORITIES

1. Provide parents with sufficient information to make an informed choice.
2. Promote comfort and healing.
3. Identify and minimize postoperative complications.
4. Instruct parent(s) in proper care of circumcised infant.

DISCHARGE CRITERIA

1. Void appropriately past procedure.
2. Free of complications.
3. Parent(s) understand care needs and signs/symptoms requiring further evaluation.

NURSING DIAGNOSIS:	**KNOWLEDGE deficit [Learning Need], regarding surgical procedure, prognosis, and treatment**
May Be Related To:	Lack of exposure, misinterpretation, unfamiliarity with information resources
Possibly Evidenced By:	Request for information, verbalization of concerns/misconceptions, inaccurate follow-through of instructions
DESIRED OUTCOMES/EVALUATION	Make informed decision.

CRITERIA—PARENT(S) WILL:	Demonstrate proper technique of care following procedure. Verbalize understanding of signs of complications.

ACTIONS/INTERVENTIONS	RATIONALE
Independent	
Ascertain parents' understanding of the procedure. Determine cultural/religious influences.	Provides a basis for discussion and identifies need for further information. While cultural/religious beliefs may dictate circumcision be performed, some studies have shown that many women do not know the meaning of the word or whether their husbands are circumcised.
Review information about the advantages and disadvantages of circumcision.	The routine practice of circumcision has been questioned, and the position of the American Academy of Pediatrics (1989) is that there are both potential medical benefits and advantages as well as disadvantages and risks. Proponents believe that circumcision may reduce risk of cancer of the penis and prostate in men and of the cervix in women; that it has prophylactic effects against a number of diseases, including herpes; that it facilitates hygiene; and that an uncircumcised boy may feel different from his peers. Opponents believe that the cancer link is not proved by scientific studies and that hygiene is more of a factor in cancer prevention than is circumcision; that the long-term effects of pain and stress are not known; and that complications are a significant concern.
Discuss anticipated infant behaviors following procedure.	Changes in sleep patterns, fussiness, and/or refusal of feedings usually persist for 2–3 hr following procedure. However, studies indicate that elevated cortisol levels associated with stress of the procedure can interfere with the newborn's ability to regulate sleep-wake cycles for some time following circumcision.
Note any special requests made by parents.	Parents may want to be present during the procedure or may have specific religious or cultural preferences.
Provide information about the healing process and proper care (e.g., cleaning, diapering, positioning, use of petroleum gauze dressing or bacterial ointment). Discuss the need to check infant frequently to prevent gauze from drying out and sticking to site of circumcision. Suggest soaking gauze with warm, sterile water before removing it.	Prevents complications associated with infection; promotes infant's comfort. Refer to ND: Pain [acute]. Note: If plastic bell method is used to cover the glans, petroleum gauze is not needed.
Discuss potential complications, e.g., hemorrhage, infection, or other signs warranting notification of healthcare provider.	Ensures prompt identifications and treatment of problems.

NURSING DIAGNOSIS:	**PAIN [acute]**
May Be Related To:	Trauma to/edema of tender tissues
Possibly Evidenced By:	Crying, irritability, changes in sleep pattern, refusal to eat
DESIRED OUTCOMES/EVALUATION	Appear relaxed, appropriately consolable.
CRITERIA—NEONATE WILL:	Resume normal sleeping and eating patterns.

ACTIONS/INTERVENTIONS	RATIONALE
Independent	
Provide pacifier (dipped in sugar, if desired), stroke lightly, and talk gently to infant during procedure. Observe infant response.	Provides distraction and sense of reassurance to soothe the infant.
Remove infant from restraints immediately following procedure. Calm infant by holding, cuddling, dressing, and talking to him. Encourage parents to feed and cuddle infant.	A sense of uneasiness occurs because of positioning and restraint. Acute pain occurs at the time of surgical procedure, because the foreskin contains numerous nerve endings. Change of position, freedom of movement, and tactile activities refocus infant's attention and comfort infant. Feeding may promote relaxation. Note: Infant's turning head away, increased restlessness, hiccuping suggest overstimulation, which may further distress the infant.
Apply petroleum jelly and gauze dressing loosely around glans, as appropriate. Leave in place for at least 24 hr.	Protects against adherence to diaper and direct contact with urine.
Position infant on side or back, not on abdomen. Loose diaper or use no diaper at all for 24–72 hr following procedure. Note continued placement of plastic rim following circumcision with plastic bell.	Prevents friction or pressure on the penis. Plastic rim remains in place for 5–7 days. Plastic bell falls off by itself when glans is healed. Note: Removal of the bell by the healthcare provider may be required.
Avoid use of soaps on penis; clean with clear water.	Soap may cause irritation, increasing discomfort, and may cause plastic bell to fall off prematurely.
Protect the surgical site from alcohol when caring for umbilicus.	Alcohol may cause stinging, adding to infant's discomfort.
Apply a small amount of bland or petroleum-based ointment on the affected area or on the dressing that may be covering the site at each diaper change or at least 4–5 times a day for 24–48 hr.	Prevents the area from sticking to diaper.
Note infant's behavior following procedure.	Acute pain following the procedure may last approximately 30 min, whereas discomfort related to trauma, edema, and irritation from clothing may last for up to 7 days until healing is completed.

Collaborative

Assist with dorsal penile nerve block with 1% lidocaine without epinephrine or chloroprocaine (Nesacine).	Although it is not used routinely, anesthesia abolishes the pain and distress manifested in the unmedicated infant by changes in hormone levels and cardiovascular system, vigorous crying, attempts to wriggle from restraints, and trembling. Nesacine has a faster onset of action. Note: Risk of nerve damage exists if injection is not carefully placed, and the risks of elevated blood levels of lidocaine are as yet unstudied.
Apply topical agents, e.g., EMLAcream (lidocaine and prilocaine) to penis.	Topical agent applied 1-2 hr before procedure may be as effective as nerve block without associated risks.
Administer acetaminophen drops as indicated.	Helps ease acute pain, enhances effects of calming behaviors.

NURSING DIAGNOSIS:	**URINARY ELIMINATION, altered**
May Be Related To:	Tissue injury/inflammation, or development of urethral fistula
Possibly Evidenced By:	Edema, difficulty voiding
DESIRED OUTCOMES/EVALUATION	Void within 6–8 hr following circumcision.
CRITERIA—NEONATE WILL:	Establish normal elimination pattern.
PARENT(S) WILL:	Prevent/minimize edema.

ACTIONS/INTERVENTIONS	RATIONALE
Independent	
Record time of first voiding following procedure. Note amount and adequacy of stream and presence of hematuria.	Trauma to the urinary meatus from the procedure may result in delayed voidings, blocked urinary passage, or interrupted stream.
Loosely diaper the newborn and position on side or back.	Reduces pressure on affected site.
Avoid placing petroleum jelly over the meatus.	Excessive amounts of petroleum jelly may block meatus, requiring greater effort to empty bladder.
Place warm, wet washcloth over the bladder area if voiding has not occurred within 6–8 hr following procedure.	Relaxes musculature and may encourage voiding.
Notify healthcare provider if infant fails to void within 12 hr following procedure.	Failure to void may indicate urethral fistula, necessitating further evaluation.

NURSING DIAGNOSIS:	**INJURY, risk for hemorrhage**

Risk Factors May Include:	Decrease in clotting factors immediately after birth (do not return to prebirth levels until the end of the 1st wk); previously unidentified problems with bleeding and clotting
Possibly Evidenced By:	[Not applicable; presence of signs/symptoms establishes an *actual* diagnosis]
DESIRED OUTCOMES/EVALUATION CRITERIA—NEONATE WILL:	Be free of injury; no evidence of hemorrhage.

ACTIONS/INTERVENTIONS	RATIONALE
Independent	
Delay surgical procedure until at least 12–24 hr following birth.	Postponing circumcision from the time immediately following birth to 12 or more hr following birth helps prevent complications associated with physiological instability, cold stress, undetected congenital anomaly, and illness.
Observe infant every hour for first 12 hr after the procedure.	Aids in early detection of persistent bleeding. Note: Excessive blood loss may be an initial indicator of bleeding/coagulation problems, such as hemophilia.
Apply gentle, direct pressure to bleeding site, using a sterile gauze pad.	Promotes vasoconstriction to stop bleeding.
Apply sterile petroleum gauze dressing to site immediately following procedure and with each diaper change, if plastic bell method is not used. Moisten gauze with water if it adheres to surgical site.	Acts as a pressure dressing to control bleeding and prevent surgical site from adhering to the diaper, which could cause further irritation or loss of stable clot.
Collaborative	
Apply Gelfoam to bleeding areas.	Gelfoam acts as a local hemostatic agent to promote platelet adhesion and clotting.
Assist with placement of suture(s), as needed.	May be necessary to control bleeding.

NURSING DIAGNOSIS:	**INFECTION, risk for**
Risk Factors May Include:	Immature immune system, invasive procedure/tissue trauma, environmental exposure
Possibly Evidenced By:	[Not applicable; presence of signs/symptoms establishes and *actual* diagnosis]
DESIRED OUTCOMES/EVALUATION CRITERIA—NEONATE WILL:	Display timely healing of circumcision site within 1 wk. Be free of signs of infection.

ACTIONS/INTERVENTIONS	RATIONALE
Independent	
Clean penis gently with warm, sterile water or dilute hydrogen peroxide, and apply fresh sterile petroleum gauze with each diaper change.	Removes urine/feces from penis; helps promote healing. Note: Excessive scrubbing may irritate the site and provide entry for bacteria.
Note appearance of whitish yellow exudate around the glans. Do not remove.	Exudate is usually noted 24–48 hr following procedure. It is a normal sign of the granulation process and eventually disappears on its own.
Observe penis for signs of infection at each diaper change, (e.g., erythema or purulent exudate). Ensure that plastic bell is still firmly attached, if used.	Early detection of infection can prevent generalized sepsis from occurring.
Collaborative	
Obtain culture of exudate, if present.	Identifies pathogens, appropriate treatment choices.
Monitor results of laboratory studies, e.g., CBC.	Helps confirm presence or resolution of infectious process.
Administer local or systemic antibiotic, as indicated.	Treats infection; prevents systemic involvement.