

Maternal Attitudes Toward Circumcision

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Two hundred questionnaires were completed anonymously by mothers to determine the nature of their attitudes and knowledge of neonatal circumcision. Neonatal circumcision had been performed on 95 percent of the sons. A wide variety of reasons were given for circumcising newborns; few were medically valid. Eighty-seven percent of mothers considered circumcision to be without risk, and 80 percent of mothers stated that the risks of circumcision had not been explained to them. This retrospective study revealed a lack of maternal understanding regarding neonatal circumcision.

Numerous papers have been written regarding the indications and contraindications of routine neonatal circumcision. These studies have given the physician little assistance in making a medical decision for performing the procedure. For example, Kaplan provides a thorough overview of circumcision methods, indications, and contraindications, but few studies have been done to assess the knowledge and attitudes of the decision-maker.¹ This is often the mother. Permission for this procedure is often granted by signing a general hospital permit in transit to a labor room. The permit is frequently a listing of common hospital procedures including transfusions, photographs, anesthetic agents, and circumcision. It has been over a decade since Shaw and Robertson sought both physician and maternal reasons for neonatal circumcision in the United States, and Patel investigated the same question in Canada.^{2,3} This study was undertaken to determine the level of maternal understanding of circumcision in relation to informed consent.

Methods

A questionnaire was made available to women at the Southern Illinois University Family Practice

Center. Only women having borne sons were asked to complete it. Either the women or their children were patients at the center. The questionnaire was to be completed voluntarily and anonymously in the waiting room or at home and returned by mail.

Results

The majority (80 percent) of mothers were between the ages of 25 and 44 years. There were 14 mothers (7 percent) between the ages of 15 and 24 years of age, 96 mothers (48 percent) between the ages of 25 and 34 years of age, 64 mothers (32 percent) between the ages of 35 and 44 years of age, and 26 mothers (13 percent) between 45 and 64 years of age. One hundred seventy-nine (89 percent) of the mothers were white, 15 (7.5 percent) Black, 1 mixed-American, and 5 with no response.

The religious preference of mothers revealed that 54 (27 percent) were Catholic, 110 (55 percent) were Protestant, 8 (4 percent) were Jewish, 9 (4.5 percent) were of other faiths, and 19 (9.5 percent) had no response.

The age distribution of sons of these 200 women is shown in Table 1. At the time the questionnaire was completed, 238 (69 percent) were between the ages of one and 14 years. Three hundred twenty-nine sons (95 percent) were circumcised as newborns. The remaining 16 were not. Three of these males were circumcised at six weeks, three

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Table 1. Age of Sons at Time of Questionnaire

Age (years)	Number	Percent
less than 2	37	10.7
2-4	57	16.5
5-14	144	41.7
15-24	76	22.0
25-34	29	8.5
35-44	2	0.6
Total	345	100.0

months, and six months. The reasons were "difficulty urinating," "distress at birth," and "adoption," respectively. Two males had repeat circumcisions and one of these had two repeat procedures, the latest at five years of age. Prematurity delayed circumcision in six cases, but were considered as neonatal circumcisions because the procedure was performed before the infant left the hospital. A total of 13 infants were not circumcised.

To the mother's knowledge, the father in each father-son pair was circumcised in 259 (75 percent) cases, uncircumcised in 75 (22 percent) cases, and not known in 11 (3 percent) cases.

Maternal reasons for neonatal circumcision are listed in Table 2. The most common responses were cleanliness, custom, and physician recommendation.

One hundred seventy-four (87 percent) of the mothers were not aware of any risks associated with neonatal circumcision. The few risks that were listed included infection, bleeding, unnecessary trauma, psychic trauma, shock, ignorance of mother in care of circumcision, and scarring.

The risks of circumcision were explained to 20 (10 percent) of the mothers. This was done by the physician in 19 cases and by a mohel, (an individual who performs ritual Jewish ceremonies) in one other case. Twenty (10 percent) mothers did not remember any explanation being given. One hundred sixty (80 percent) mothers did not have the risks of circumcision explained to them.

Discussion

The United States has the highest rate of neonatal circumcision, for other than religious

reasons, of any nation in the world. This elective procedure has an estimated yearly cost of \$60 million.^{1,4} The incidence of newborn circumcision in US Air Force hospitals is 97.9 percent.⁵ This study reveals a 95 percent incidence of newborn circumcision. Only 75 percent of the fathers in the father-son pairs were circumcised according to respondents. Mothers did not know the circumcision status of their mates in 11 (3.0 percent) of cases, which reflects the lack of reliability of their observations.

As in previous studies, the reasons for newborn circumcision span a gamut from esthetic to legal. The small number of medical reasons (decreased chance of penile cancer and prevention of infection), although vague, are in a marked minority to the common responses of "cleanliness" and "routinely done." The vagaries of these responses reveal the lack of proper information being made available to the mother. Eighty-seven percent of mothers were unaware of any risks associated with neonatal circumcision. There are a wide variety of complications, both early and late, which are well described by other authors.¹ Gee and Ansel noted a 0.2 percent rate of significant early complications.⁶ Bleeding and infection were the most common. Patel documented a higher incidence of early and late complications. Meatal ulceration (31 percent) and stenosis (8 percent) were the most frequent late complications.³ Obstructive renal disease can result from meatal stenosis.⁷ Death due to hemorrhage or sepsis can complicate circumcision.^{8,9} Spreet reported on death in 500,000 cases in New York City.¹⁰ Sex change necessitated by slough of the penis following circumcision has been reported.⁶ Plastic surgical procedures can be required if the penile shaft is denuded during circumcision.

Eighty percent of mothers denied that a physician had discussed the risks of circumcision with them. However, this includes recall for a period up to 44 years in this retrospective study. A more reasonable recent interval of five years includes 94 sons. There were 82 mothers for these sons. Sixty-seven (82 percent) mothers did not have the risks of circumcision explained, 10 (12 percent) were informed, and 5 (6 percent) did not remember.

It is interesting to note that these percentages are very close to those for the entire group of mothers; 80 percent, 10 percent, and 10 percent,

Table 2. Reasons Given by Mothers for Circumcision of Infants

	Number	Percent
Cleanliness/Health reasons	94	35.0
Custom/Routine	43	16.1
Physician recommended	31	11.6
None listed	29	10.8
Prevents infection	18	6.7
Husband favored	10	3.7
Religious	9	3.3
Less painful on infant	9	3.3
Decreased chance of cancer	6	2.2
Mother felt it was best	4	1.5
Prevents embarrassment	3	1.1
Law requires	3	1.1
Prevents VD	2	0.7
Maternal esthetics	2	0.7
Other	6	2.2
Total	269	100.0

respectively. There were 10 sons less than 5 years of age borne to these 10 informed mothers, 3 of these sons were not circumcised. All of the sons (less than five years of age) except one were circumcised in the group of mothers not informed of the risk of circumcisions. Shaw and Robertson found that the risks were not discussed with 72 percent of mothers questioned.² Patel found that circumcision was discussed with 34 of 100 mothers.³ If the risks were discussed, it was done most commonly by a physician. Many mothers have no idea of the possible risks their sons have through circumcision. The results of this study strongly suggest that mothers need to be better informed of the indications, benefits, and risks of the circumcision. The physician is more than a technician. He is best prepared to educate the parents regarding circumcision and to enter into the decision making process. The physician can have a definite influence on the incidence of circumcision. Patel found that newborn circumcision was performed in 100 percent of cases by physicians who favored the procedure and in only 20 percent of the cases by physicians who opposed circumcision.³

Summary

This study reveals a high rate of circumcision for newborn males (95 percent). Maternal reasons

for circumcision had little medical foundation. The maternal understanding of the risks of circumcision are for the most part lacking. Yet consent for a possibly dangerous procedure is often given without the opportunity for informed consideration. Maternal attitudes and understanding of circumcision have changed little in the past decade. The study indicates the need for physicians to be actively involved in patient education and in the decision making process for newborn circumcision. Further studies assessing physician attitudes and knowledge of the risks and benefits of circumcision are needed.

References

1. Kaplan GW: Circumcision—an overview. *Curr Prob Pediatr* 7:3, 1977
2. Shaw KA, Robertson WO: Routine circumcision. *Am J Dis Child* 106:216, 1963
3. Patel H: The problem of routine circumcision. *Can Med Assoc J* 95:576, 1966
4. King L, Morris R, Pearson H: Circumcision: Rite, rational, or both? *Patient Care* 12(5):72, 1978
5. Schwark TE: Do edicts have any effect on circumcision rate? *Pediatrics* 60:563, 1977
6. Gee EF, Ansel JS: Neonatal circumcision: A ten year overview. *Pediatrics* 58:824, 1976
7. Lindshaw MA: Circumcision and obstructive renal disease. *Pediatrics* 59:790, 1977
8. Burger R, Guthrie TH: Why circumcision? *Pediatrics* 54:324, 1974
9. Shurlock JM: Neonatal meningitis and circumcision. *Med J Aust* 1:322, 1977
10. Speert H: Circumcision of the newborn. *Obstet Gynecol* 2:164, 1953