MEDICINE ELSEWHERE

Prepared by

Tufan Tarcan, M.D.

Department of Urology, School of Medicine, Marmara University, Istanbul, Turkey.

Groutz A, Blavias JG, Chaikin DC. Bladder outlet obstruction in women: Definition and characteristics. Neurol Urodynam 2000;19:213-220.

Bladder outlet obstruction (BOO) has traditionally been attributed to the male gender. Since it has been taken for granted for decades that lower urinary tract symptoms (LUTS) of aging men are caused by prostatic obstruction these symptoms have been called as "prostatism symptoms" and have been the main indication for prostatectomy.

However, recent epidemiological and urodynamic data have shown that aging women do also suffer from LUTS, the same level as their male counterparts do. So, the following questions have arised: Do LUTS of aging men have other causes than a prostatic obstruction that are also shared by women? Or may there be also something in the elderly women that obstructs the bladder outlet?

In order to know whether women may be obstructed or not one has to physically define the BOO in women. It will be incorrect to simply apply the well-established male urodynamic standards of obstruction to women because the female voiding apparatus has several anatomical and physiological differences compared to its male counterpart. Thus, specific urodynamic criteria for obstruction in women is lacking and, therefore, the incidence of BOO in women remains unknown.

In the present study, Groutz et al have examined the urodynamic features of 587 women with LUTS and tried to define the female BOO. The authors have considered a persistent maximum flow rate less than 12 ml/sec combined with detrusor pressure at maximum flow rate more than 20 cmH20 as an indicator of BOO. Using these urodynamic criteria, 38 women (6.5% of the study population) were found to have BOO. The mean age of women with BOO was 64 years and 29 of them (76%) were post-menopausal. Previous anti-incontinence surgery and severe genital prolapse were the most common etiologies encountered in half of the cases. Other, less common causes were urethral stricture or narrowing, primary bladder neck obstruction, learned voiding dysfunction and detrusor-sphincter dyssynergia. Endoscopy findings or symptomatology were not predictive for urodynamically defined BOO. The authors have suggested that BOO in women seems to be more common than was previously recognized. Since endoscopy findings and symptoms are found to be non-specific for BOO a full urodynamic investigation may be necessary for correct diagnosis.

This is really a valuable study reflecting a big experience and emphasizing an underestimated cause of voiding dysfunction in women. However, there are still controversies in the urodynamic definition of BOO which is proposed by the authors. There is a lack of information about urodynamic findings of asymptomatic women to establish "what is normal". Therefore, the cut off levels of maximum flow and detrusor pressure may not be correct.

What level of voiding pressure should be considered as normal in elderly women? Many women void by way of pelvic relaxation or abdominal straining without generating significant detrusor pressures. This is understandable because the female urethra is shorter and lacks the prostate so that the bladder smooth muscle faces less resistance. In parallel,

urethral sphincters are anatomically and physiologically weaker in women. Another interesting characteristic of many women is that they train their bladders to hold increased volume of urine in order to decrease their voiding frequency. This "learned voiding dysfunction" leads to a greater bladder capacity but a weaker detrusor muscle. On the other hand, it is still a dilemma why many elderly women have trabeculated bladders which is thought to be a result of high voiding pressure or obstruction. The answer may be organ prolapsus and urethral narrowing due to hormonal changes, which needs to be supported by further urodynamic data and a better understanding of female voiding.

Prepared by

Mithat Erenus M.D. / Ayşegül Gürler M.D.

Department of Obstetrics and Gynecology, School of Medicine, Marmara University, Istanbul, Turkey

Bumpass LL, Thomson E, Godecker AL. Women, men, and contraceptive sterilization. Fertil Steril 2000;73:937-946.

Once highly stigmatized and disapproved, sterilization has become the primary contraceptive method in the United States and is adopted in three quarters of all marriages that remain intact. The profound increase in contraceptive sterilization began shortly after the introduction and rapid diffusion of oral contraceptives, and it seems likely that experience with the pill was an important catalyst for the mass acceptance of sterilization. They were so much more effective and separated contraception from sexual intercourse. However, as concerns about the long-term safety of oral contraceptives grew, tubal sterilization and vasectomy became increasingly attractive as alternatives that shared the characteristics of being highly effective and unobtrusive. In addition to method characteristics, a number of other issues are important in sterilization decisions. It is most important that contraceptive sterilization is not appropriate for those who intend another child, nor is it attractive to those who are uncertain about whether they want another. But, we must recognize that there may be a period of uncertainty before a decision is reached to have no more children. When couples disagree about having more children, the conceptualization and measurement of "last wanted birth" becomes even more difficult. Couple disagreement should lead to the postponement of sterilization. One of the major puzzles in the adoption of sterilization is that tubal sterilization has become so much more common than vasectomy, when the latter is safer, less expensive and equally effective in preventing births. Most studies of the choice between tubal sterilization and vasectomy assume a two-stage decision process in which the couples first decide to terminate childbearing with sterilization and then negotiate which spouse will be sterilized. For many couples, the decision about sterilization may be specific to one partner. For example, a wife may believe-correctly or not-that her husband would not consider vasectomy, so that the decision she makes or one of the partners may feel more strongly about preventing further pregnancies and decide on her/his own to be sterilized. Furthermore, unmarried women are increasingly choosing to be sterilized. The context of childbearing decisions has changed dramatically because marriage is being delayed, and one third of all births are to unmarried mothers.

In this study the data used come from cycle 5 of the National Survey of Family Growth (NSFG). This is a periodic survey conducted by the National Center for Health statistics with the primary goal of providing estimates of factors affecting the US birth rate and the reproductive health of US women 15-44 years of age. Interviews averaging 105 minutes were conducted with 10,847 respondents. Key to our current analysis are pregnancy and birth histories, dates and types of sterilizing operations (and contraceptive intent), the planning status of each pregnancy and an array of characteristics of the respondent and her husband. The sample for the analysis of couple choices is limited to currently married couples for whom the date of last wanted birth occurred since 1980 and after the date of their marriage and for whom had consistent dates.

Because sterilization is a contraceptive choice only for those who have completed childbearing, analysis must be structured to reflect this-even given the ambiguities and uncertainities associated with the measure. Consequently, we estimated the date of last wanted birth and analyzed sterilization after this date. The date of the last birth is used for the 89% of sample who do not report having had an unwanted birth. For women who report unwanted births, their history gone back to the last birth that was reported as wanted. For the few women who have no children and intend none, we set the date as one-half the time between age 15 and the present.

In this study multinomial logistic multiple regression is used to compare subgroup differences in the probability of having a sterilizing operation within 5 years of the last wanted birth. The independent variables include five based on life course stage at the time of the last wanted birth (ages of wife and husband, parity, duration of marriage, and whether either had married before) and the wife's age at first birth. Social and economic variables include race or ethnicity, education of both spouses, wife's religion, and region and size of place of residence. It is noted that a significant proportion of never-married women report that they are sterilized. One third of all recent tubal sterilizations were performed on unmarried women. Sterilization while unmarried is remarkably common among all race or ethnic groups. Approximately 9% of the ster-ilizations on white women were performed while they were in cohabiting relationships. Almost one fifth of the tubal sterilizations in black women was performed while they were living in a cohabiting relationship. Age and parity at the time of sterilization are similar for unmarried and married women. The high proportion of female sterilizations that now occur outside of marriage seems to be entirely due to the fact that many women have all the children they want, either while never married or after marital disruption. Female sterilization is so much more common than male sterilization, probably because having a partner choose vasectomy is much less an option for unmarried women. The much higher level of unmarried sterilization among women than among men indicates that women consider sterilization relative to alternatives in the context of having to raise children already born. Men, on the other hand, may often have little connection with children they have fathered while unmarried. Both males and females the highest rates of sterilization occur in the first year after last wanted birth, with a gradual increase thereafter. Three quarters of all steriliza-tions occur within the 5-year period.

The number of children a couple has, their age, and how long they have been married may affect how sure they are that they do not want more children and, thereby, affect the likelihood of sterilization. A positive relationship between parity and the likelihood of sterilization would be expected if couples at lower parities are less sure that they have indeed completed their family, and if-because of previous planning failures-those at higher parities are more highly motivated to end childbearing. More sterilizations occur among women with two children than at any other parity, but this is so because most women prefer a family size of two children. However, the likelihood of sterilization increases consistently with parity. As with parity, age would increase the likelihood of sterilization if it were associated with increased confidence in the decision to cease childbearing. On the other hand, age could have negative effects, if women in their late 30s or early 40s feel that they are too close to menopause to make sterilization worthwhile. The rate of vasectomy is significantly higher among couples in which the wife is in her late 20s. The effects of husband's age became clearest when we classified it relative to wife's age: those 2 or more years younger than their wife and those 5 or more years older. Wives with substantially younger husbands are more likely to have a tubal sterilization, and those whose husbands are older by ≥5 years less likely. It is expected that women who were married before, those who maried at an early age, and those who have experienced unintended births or abortions would be more likely to adopt sterilization. The results are only partially consistent with these expectations.

The most striking differential in choice of tubal sterilization over vasectomy is associated with race. Tubal sterilizations are no longer twice as prevalent among black women than among white women, but large disparities in both male and female procedures remain. In fact, although the prevalence of vasectomy has increased

substantially for whites, it has increased hardly at all for blacks. The combined proportions sterilized within 5 years of their last wanted birth are 63% for black couples, 60% for Hispanic, and 55% for whites. The effects of wife's education on vasectomy are not monotonic: the major contrast is between husbands of wives who did not complete high school and all higher levels of schooling. Compared with couples with the same level of education, tubal sterilization predominates among those in which the husband is less educated, but vasectomy rates are higher among those in which he is more educated than his wife. Size of place has no significant effect on rates of sterilization.

In conclusion, contraceptive sterilization is an extremely important factor in fertility and family processes in the United States, and analyses of the factors affecting the relevant decision processes have been too neglected in nationally representative data. The observation that sterilization is now the leading method of birth control in the United States substantially understates its importance, because it is not an appropriate method until the decision to end childbearing is held with confidence. Decisions to end childbearing and to consider sterilization are a critical stage in the family life course.

Schwingl PJ, Guess HA. Safety and effectiveness of vasectomy. Fertil and Steril 2000;73:923-936

Vasectomy is a simple and highly effective contraceptive method with a low morbidity rate and an extremely low mortality rate. Worldwide, approximately 42-60 million men or 5% of married couples of reproductive age rely on vasectomy as a contraceptive method. A large international variation in the prevalence of vasectomy exists among reproductive age married couples. Vasectomy is prevalent: in New Zealand, the United States, the Netherlands, South Korea, Australia, China, and India. Approximately, 10.9% women aged 15-44 in the United States rely on vasectomy for family planning. The percentage of women relying on vasectomy as their contraceptive method has remained stable since 1982. Most women reporting vasectomy as their contraceptive method are non-Hispanic whites. The National Survey of men reported that 12% of married men aged 20-39 had a vasectomy, with the largest proportion being in the 35-to 39-year-old group (21.6%). Vasectomies were far more common in white (13.5%) than in black men (1.6%) and among men with a high school education (13.7%) or more than a high school education (10.9%). The husband's age race, education, and religion had strong effects on the likelihood of male sterilization. Whereas the wife's characteristics played a lesser role. Having an unintended last pregnancy using a male method was a strong predictor of having had a vasectomy. Data from a retrospective survey conducted in 1991 estimated that there are approximately 500,000 vasectomies performed annually in the United States, or 10.3 procedures I per 1,000 men aged 25-49 years. Urologists perform most vasectomies with family practitioners and general surgeons.

In the United States, vasectomy is typically performed as an outpatient procedure under local anesthesia. Conventional incisional vasectomy and no-scalpel vasectomy are the two most common surgical techniques for approaching the vas. Several surgical techniques for occluding the vas have been developed with the goals of avoiding recanalization of the vas, enhancing potential for reversal or avoiding side effects associated with increased pressure on the testicular end of the ligated vas. A method of vasectomy used in China is a percutaneous technique involving chemical occlusion with a combination of cyanoacrylate and phenol. There are no permanent contraindications to vasectomy, but vasectomy should be delayed in the presence of local infection, acute systemic infection, signs or symptoms of sexually transmitted disease, filariasis, elephantiasis, intrascrotal mass or hypersensitivity to the anesthetic agents to be used.

Vasectomy should only be performed after proper counseling about the effectiveness and safety of the procedure and after patients have given informed consent. Counseling should include [1] other possible con- traceptive methods, [2] emphasis on the intended irreversibility of the procedure, [3] the small possibility of method failure, [4] the possibility of regret, and [5] what happens at the operation.

Vasectomy is considered one of the most reliable family- planning methods currently available. Pregnancy rates associated with vasectomy are reported in the range of 0 to 2%, with most reporting <1%. However, although vasectomy is widely considered highly effective, the specific failure rates associated with different techniques have not been well quantified in clinical trials. There are early, late, overt, or technical failures. Early failure of the procedure is considered to have occurred when significant numbers of spermatozoa or any motile spermatozoa persist continuously later than 4 months after vasectomy. Another method of contraception should be used until the semen is sperm free, or where analysis is not possible, until the man has ejaculated at least 20 times postvasectomy. For some, technical failures are synonymous with all early failures, whereas for others, technical failures are non-significant numbers of immotile spermatozoa present 1 year or later after vasectomy. The rate of early failure has varied from 0.3% to 0.6%. Late failure occurs when motile spermatozoa reappear in the ejaculate, signifying that recanalication has occurred. Failures occurring years after the procedure are usually detected only after a pregnancy has occurred. In summary although vasectomy is reported to be highly effective and differences in effectiveness appear small, long-term conducted study on the long-term effectiveness of the method is available, nor are clinical trial data available on different methods of vas occlusion.

Approximately 1-3 per 1000 vasectomized men will request a reversal. The success of reversal ranges from 30%-60%. As time passes success of the procedure declines with time since vasectomy.

Intraoperative and early postoperative complications include bleeding or hematoma, infection, acute epididymis and need for hospitalization. Incidence of complications varies with surgical technique and the number of vasectomies performed annually by the practitioner. Congestive epididymitis is a long term complication. It presents as pain and testicular tenderness. It lasts weeks to months, treated with analgesics and antibiotics. Another long term complication is pain. It has been attributed to long-standing obstruction with dilatation of epidiymal ducts, extravasation of sperm.

In two studies mortality among men undergoing vasectomy have found lower rates of mortality among men with vasectomies than among their matched controls. Most appropriate interpretation of this is that there is no evidence for an overall increase in mortality associated with vasectomy. On the basis of studies it seems unlikely that vasectomy and prostate cancer are causally linked. A meta-analysis of the results of studies to date indicated a slightly elevated risk of prostate cancer among men with vasectomies, but this effect varied depending on the study design, the detection bias. Also no elevated risk of testicular cancer reported. Bone mineral density is not affected by vasectomy.

Twenty percent of men with vasectomies develop antibodies to internal nuclear sperm antigens called protamins. The major impact of antisperm antibodies tend to be on the reduced rate of pregnancy after vasectomy reversal.

A primary disadvantage of vasectomy is that, it provides no protection from sexually transmitted disease. The acceptability of vasectomy by large populations is somewhat limited. Compared with either no contraceptive method or 14 other methods currently used, vasectomy is one of the most cost-effective.

Studies are needed to develop evidence -based guidelines on recommended numbers and timing of postvasectomy visits and the use of alternative contraception in settings where semen analysis is not practical.

MEETINGS

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e-mail: tabibie@dtpepn.nci.nih.gov

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Phone: 90 216 325 20 52
Fax: 90 216 325 85 19
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28 October - 2 November 2000 Philadelphia, USA

The 64th Annual Scientific Meeting of the American College of Rheumatology and 35th Annual Scientific Meeting of the Association of Rheumatology Health Professionals

Contact: Angela Sigari
Phone: (404) 633 37 77
Fax: (404) 633 18 10
e-mail: asigari@rheumatology.org

ANSWER TO PHOTO QUIZ

Diagnosis: Goldenhar Syndrome

Oculo-auriculo-vertebral spectrum (OAV) is the most common craniofacial malformation other than cleft lip and palate with an incidence from 1 per 3500 to 1 per 5600 (1,2). The Goldenhar subset accounts for 4% to 10% of the OAV spectrum (3,4).

OAV represents a breadth of phenotypic variation from mild cases of unilateral microtia to severe cases involving microtia, mandibular hypoplasia, cervical spine anomalies, and epibulbar dermoids, as in Goldenhar syndrome. Autosomal dominance inheritance have been postulated in Goldenhar Syndome. It is the most severe form of OAV with microtia, mandibular hypoplasia, epibulbar dermoids. Since the second branchial arch is affected, three-dimentional growth of the lower facial skeleton is retarded asymmetrically. Clefting of the lip and palate may be associated.

Skeletal correction primarily involves that of mandibular reconstruction with correction of the occlusal plane, and augmentation of zygoma.

Before external ear reconstruction mandibular distraction was planned in this patient in order to prevent upper airway obstruction. Mandible was distracted 18 mm on the right, 28 mm on the left side (Fig.2 a,c: Preop. frontal and lateral view. Fig.2 b,d: Postop. frontal and lateral view). External ear reconstruction with costochondrial cartilage graft is planned for the future.

REFERENCES

1. *Grabb WC. The first and second branchial arch syndrome. Plast and Reconstr Surg 1965;36:485-508.*
2. *Poswillo D. Otomandibular deformity: Pathogenesis as a guide to reconstruction. J Maxillofac Surg 1974;2:64-72.*
3. *Gosain AK, McCarthy JG, Pinto RS. Cervicovertebral anomalies and basilar impression in Goldenhar Syndrome. Plastic Reconstr Surg 1994;93:498-506.*
4. *Rollnick BR, Kaye CI, Nagatoshi K, et al. Oculoauriculovertebral dysplasia and variants: Phenotypic characteristics of 294 patients. Am J Med Genet 1987;26:361-375.*

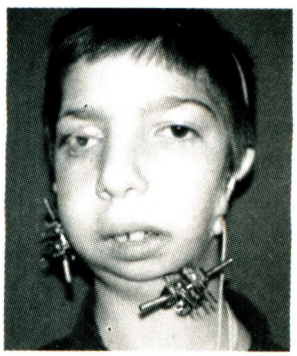

Fig.2a

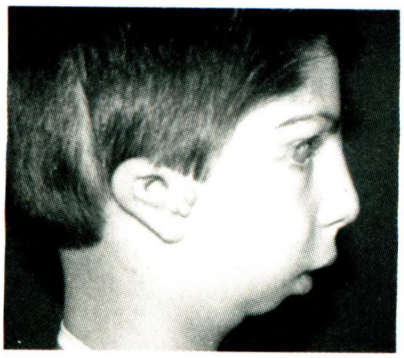

Fig.2c

Fig.2b

Fig.2d

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Academic Hospital

Altunizade Nuhkuyusu Cad. No: 88 Üsküdar

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