

Gender Dysphoria Program, Inc.

(415) 326-4645 900 Welch Road, Suite 402 Palo Alto, California 94304

Judy Van Maasdam, Coordinator Donald R. Laub, M.D. Norman M. Fisk, M.D.

Thank you very much for inquiring about the operations for the construction of a penis. We have a special interest in these operations. We have been doing the work since 1969. Attempts at surgical construction of the penis have been made for over 50 years.

There are three choices, or procedures, for construction of a penis that are available through our program. None of the operations are perfect, although we are able to offer a choice to better the needs and objectives of the particular individual. The three procedures are: 1) the abdominal tube (phalloplasty or Plan A); 2) the use of existing tissue (genitoplasty or Plan B); and 3) the forearm flap with microsurgery (Plan C). Plan A and Plan C can be combined.

Phalloplasty, or Plan A, is performed in two stages, 10-12 weeks apart. This first stage phalloplasty is performed as outpatient surgery under general anesthesia. In the first stage, we form the new penis with tissue from the lower abdomen. In medical terms, we form a pedicle flap and apply a skin graft from the hip to the outside surface of the tube of tissue. The skin graft is a thin sheet of skin removed from the hip. Two parallel incisions are made in the abdominal wall in an up-and-down direction from the level of the cleft of the labia majora upward to about 1.5 inches to 2 inches below the naval. From this tissue, a penis is formed; but it is attached to the body in two places until this abdominal tube is released from the upper attachment in second stage. The penis contains a tunnel formed from tissue that was formerly the abdominal The resultant donor site defect on the abdomen is usually closed directly with sutures. Complete healing of the abdominal tube with skin graft takes about six weeks. After healing, we begin training the penis, during the next six weeks, to depend on the circulation from the lower attachment only, by tourniqueting the upper attachment of the penis. Patients usually remain in our area for 12 days; and stay out of work for 2 to 3 weeks depending on the healing. Smoking directly relates to complications of healing in the first stage phalloplasty. Obesity does not help.

The penis is detached in the second stage operation and a glans, or head of the penis, is formed. If not already completed, the hysterectomy (removal of the uterus) and an oophorectomy (removal of the ovaries) are accomplished at this time. Testicles are placed in the labia majora to form a scrotal sac at this second stage, if surgical urinary extension is not being performed as a third stage operation. If the hysterectomy and oophorectomy have been completed previously, this second stage is outpatient surgery. If the hysterectomy and oophorectomy are performed, the hospital stay is usually two days. As in the first operation, smoking causes changes in skin circulation, and may cause complications.

The abdominal tube penis may be made even though the hysterectomy has been performed previously. An up and down direction for the hysterectomy incision, off to one side, is preferred. An incision in the horizontal direction usually requires two years of healing and maturation before the penis surgery.

Until a permanent penile implant is inserted surgically, a baculum, or rod, is placed in the penis tunnel for erection. The baculum is a stiff plastic rod made and fitted to each individual penis by an anaplastologist. The baculum directly stimulates the clitoris and labia minor during intercourse. It is used only during intercourse. Whether a baculum may be used successfully with the surgical extension of the urinary tract is a matter of trial and error at this time. It has not been needed with urinary extensions accomplished with microsurgery.

The advantages of Plan A are:

- The size can be natural or even large.
- The appearance is realistic.
- The ability to perform intercourse can be achieved with the baculum.

The disadvantages of Plan A are:

- Two operations are necessary.
- Feeling (sensation) and ability to urinate through the glans require additional surgery.

The forearm flap with microsurgery is actually a "Deluxe Plan A". Sensation in the clitoris is transferred to the head of the penis with a nerve graft. Ability to stand to urinate is accomplished. The penis is formed according to the previously described phalloplasty. Microvascular (microscopic) surgery is used to transplant and anastomose (hook-up) the blood vessels and nerve of the inner forearm into the new penis, providing great blood supply and sensation to the head of the penis. The forearm nerve is attached to one of the clitoral nerves giving sensation to the head of the penis. Non hairy forearm skin is also brought to the penis for the urinary extension. The surgery requires a high degree of technology and takes about six hours to perform with a 4-5 day hospital stay. It is relatively new and/or experimental. Usually there is only a line scar on the forearm. A vaginectomy (removal of the vagina) is also necessary for the urinary extension.

The advantages of microsurgery or Plan C are:

- Same as Plan A.
- Additionally, feeling and sensation are throughout the penis, even in the glans.

The disadvantages of Plan C are:

- Multiple stages of surgery are necessary.
- It is more costly.

The extension of the urinary channel to the end of the penis can be accomplished in a third stage operation without microsurgery, but with electrolysis. The labia minora and other surrounding tissue are enfolded, connecting the tunnel in the penis with the existing urine opening. The vagina must be removed and the mucosa, or part of the vagina, is moved a short distance so that it helps form part of the tube. In order to close the tissue into the urinary channel, it must be free of hair. Hair causes infections, stones, and obstructions to the passage of urine. Therefore, it is necessary to have the hair removed prior to the first stage phalloplasty operation. The hair removal is done by electrolysis from a licensed electrologist. However, this process may be painful and time and money consuming because the hair removal takes a six month to one year period of time. We will assist the electrologist with a photo indicating the area for hair removal. Phalloplasty should not be performed until 15 weeks after the last electrolysis treatment in order to make certain that the hair removal is permanent.

A permanent penile implant can be placed in the penis as an option of phalloplasty. At this time, the urinary extension and permanent penile implant are not performed at the same time. Permanent penile implants are not without mechanical problems.

Standing to urinate can also be accomplished without (micro) surgery by placing externally a plastic silicone tube with a small cup that collects the urine and conducts it to the tunnel in the penis. It is simple, but requires practice to master the technique. The urinary assist device (UAD) must be held in place with the hand at the time of urination. It may be worn in the underwear.

Genitoplasty (the technical name of this operation is metadoioplasty) or Plan B, uses existing tissue - the enlarged clitoris and the labia minora form the penis. The labia majora form the scrotum, silicone testicles fill the scrotum. Metadoioplasty/genitoplasty moves the enlarged clitoris forward to the penis position, frees it from tethering by fibrous tissues (chordee) and the labia minora. After freeing and moving the clitoris, it can appear somewhat larger than its former position before surgery, although the clitoris must respond to testosterone by increasing in size to be "eligible" for this operation. The labia majora are sutured together and testicles are inserted in this structure to form a scrotum. If a hysterectomy has not been completed, it is performed at this surgery with a two day hospital stay. About one month off work is usual with this surgery.

- e advantages of metadoioplasty or Plan B are:
 - The genitalia have the almost exact appearance of the male genitalia, but they are small.
 - Cost is lower than phalloplasty.
 - Feeling and sensation and nerves are preserved.
 - The operation is usually one stage.
 - Extension of the urinary tract to the tip may be possible in certain patients.

The disadvantages of Plan B are:

- The penis is not large, but usually about 1 to 1.5 inches.
- Urinary extension may not be possible and may interfere with the nerves or natural erection.
- Phalloplasty after metadoioplasty requires an entirely different technique and is more difficult.

Each surgery program is individualized and costs reflect the individual's objectives and constraints. At the time of your evaluation and consultation, Dr. Laub will show you photographs of the procedures as well as discuss all the various aspects, the advantages and disadvantages, and the technical points of each procedure. Costs for penis construction range from \$6,000 to \$30,000, depending upon the procedure chosen. Specific costs are given at the time your surgical plan is developed.

Mastectomy revisions are performed at the time of other surgery if they are desired.

Suction removal of fat (without a large skin scar) is a newer procedure that seems to be of benefit for some persons in the flank areas, the hips, the abdomen, the sides of the chest, and the lower aspects of the chest. Fees for these procedures are in addition to fees for the genital surgery.

We utilize autologous transfusions; i.e., donation of blood from yourself, several weeks prior to surgery, in order to avoid AIDS and hepatitis. As much work as possible is performed in the operating room next to the office, where costs are lower.