

Sexually Transmitted Diseases and Contact with the Orthotics-Prosthetics Professional

Steven D. Prock, C.P.O.

INTRODUCTION

Over the past few months the author has noted an alarming increase in the number of articles and stories published concerning sexually transmitted diseases. Each article describes these sexually transmitted diseases at epidemic levels and the medical field's growing concern about this. The author had never given these diseases much thought until he read an article which described a means of transmittal as "direct contact" other than "sexual contact." It was only then that the author started asking questions and doing research concerning these unmentionable diseases. While the author does not wish to cause alarm, this article is intended to create an awareness about sexually transmitted diseases.

DISCUSSION

A person has the greatest chance of contracting one of the more than 25 types of venereal disease through sexual contact, but there are very real possibilities that the prosthetist and orthotist could contract one of these diseases in his daily routine. Whether the orthotist is palpating for the

symphysis pubis, or the prosthetist is palpating for the ischial tuberosity, they are in close proximity of the perineal area. Working in this area increases the chances of coming in contact with a venereal disease; however, infestation is not restricted to just the perineal area.

Transmission of a venereal disease can be made when one comes in direct contact with an infected person, or from freshly contaminated material.¹ Even innocently putting your hands near your nose or mouth after examining a patient has its hazards. There are many ways of contracting a sexually transmitted disease and work in the prosthetic-orthotic field increases your chances of acquiring these diseases.

Since we can now see that "direct contact" instead of just "sexual contact" can transmit these diseases, we should be aware of the signs and symptoms and other modes of transmission of these diseases. The following outline is a condensed version of the six most common types of sexually transmitted diseases and their signs and symptoms.² This is not a complete overview and is in no way designed to be used in self-diagnosis. It is only meant as a tool to help increase awareness of these diseases.

I. A.I.D.S. (Acquired Immune Deficiency Syndrome)

A. Signs & Symptoms

1. Weight loss, weakness, fever, generalized lymphadenopathy, and the appearance of a variety of opportunistic infections.
2. On physical examination, one could find white plaques of candida in the mouth. Also, herpetic lesions on the genitals or the rectal area.
3. Early lesions may appear as asymptomatic, subtle, reddish-blue patches. Over a period of days to weeks, lesions become more nodular with deeper purple color and often yellowish-green "bruise-like" margins.

4. The person could have a history of hepatitis, gonorrhea, syphilis, or herpes. High risk groups include homosexuals, intravenous drug abusers, and recent Haitian immigrants.

B. Transmission

1. A.I.D.S. is likely to be contracted through an open sore by contact with blood or any secretions from the eyes, nose or mouth.³

(It is interesting at this point to note that the dental community is routinely taking precautions such as masks and gloves to prevent contact with blood and facial secretions.)

II. Syphilis

A. Signs & Symptoms (Primary stage)

1. Initial lesion appears two to four weeks after inoculation, changing from a small red papule to a small ulcer to a hard chancre, usually on prepuce or vulva.
2. Lymph nodes enlarge about two weeks after appearance of lesion.
3. Inflammation at mouth of Stenson's duct and enlargement of epitrochlear lymph nodes.

B. Signs & Symptoms (Secondary stage)

1. Lesions of the skin and mucus membrane.
2. Systematic symptoms such as headache, fever, and malaise are common, but may be absent.

3. Enlargement and induration of regional lymph nodes.
4. Eruptions of the skin, maculae (rosella) syphilide, reddish-brown coppery spots continuing for one to two weeks.

C. Transmission

1. Direct contact between humans.
2. Contact with freshly contaminated material.
3. Transfusion of infected blood or plasma.
4. Utero passage of organism from mother to fetus.
5. Through a broken place in the skin or mucus membrane.⁴

(Syphilis is more likely to be contracted in the secondary stage than in the primary.)

III. Herpes (Genital)

A. Signs & Symptoms

1. Vesicular lesions on vulva, perinum, vagina, and cervix in women, lesions on penile shaft, prepuce, glans penis, scrotum, and perinum in men.
2. Tender adenopathy, dysuria, and constitutional signs more common with primary infections than those recurring.⁵

B. Transmission

1. Direct contact between humans with an active infection.
2. Medical and dental professionals frequently develop herpes infections on their hands from contact with a patient who is shedding the virus at the time.
3. Sometimes a person with herpes may shed virus particles even though no sores or other signs of recurrence are present.⁶

(Herpes is easily contracted through an active lesion.)

IV. Venereal Warts

A. Signs & Symptoms

1. A pointed, reddish moist wart about the genitals or anus.
2. Develops near mucocutaneous junctions forming pointed, tufted, or pendulated pinkish or purplish projections of varying length and consistency.

B. Transmission

1. Direct contact between humans.⁷

V. Gonorrhea (Figure 5)

A. Signs & Symptoms

1. Males

- a. Yellow mucopurulent discharge from penis due to inflammation of the urethra. May become deep-seated and affect the prostate.
- b. Slow, difficult, and painful urination.
- c. Sometimes painful induration of the penis.

2. Females

- a. Slight pain (not enough to seek medical help).
- b. Urethral or vaginal discharge.

c. Frequent or painful urination.

d. Lower abdominal pain.

e. Tenderness in the area of Bartholin's and Skene's glands.⁸

B. Transmission

1. Direct and close contact with an infected person (not necessarily intercourse).⁹

(Contracting gonorrhea is less likely than the aforementioned diseases. Even with an open wound the risk is minimal.)

VI. Chlamydia

A. Signs & Symptoms

1. Females

- a. Vaginal discharge.
- b. Fever
- c. Stomach pain.
- d. Burning sensation during urination.

2. Males

- a. Whitish discharge from penis.
- b. Itching or burning during urination.

B. Transmission

1. Sexual intercourse.
2. Vaginal delivery of a baby.
3. Rarely by any other means.¹⁰

(Contracting Chlamydia is not likely in the prosthetic or orthotic line of work. There is a risk, but it is very minimal.)

VII. Other Potential Hazards

A. Hepatitis B

B. Strep

C. Staphylococci

D. Tuberculosis

PROPHYLAXIS

The following is a list of ideas which may help you protect yourself from possible contact with sexually transmitted diseases. If you do take precautions, I suggest that you have some type of "checks and balances" system due to the fact that one precaution may not be enough. Also, quite often, females honestly do not know they are infected.

- Sterilize any and/or all equipment (this may not always be feasible or practical).
- Ask specific questions on patient information forms (word these so that symptoms are described, i.e., "do you have painful urination?" not, "do you have, or have you had, a venereal disease?").
- Delay services until suspicious lesions are identified and treated.
- Begin personal and patient education.
- Use the following items and procedures as a guide for personal care:
 - gloves
 - gowns
 - masks
 - washing hands after each patient
 - bandaging and protecting open wounds
 - cleaning the suspected area of the device with strong cleaner before working.

In most cases, wearing gloves and routine cleanliness of the hands would be practical and adequate protection against these diseases.

CONCLUSION

Venereal disease can be transmitted by means other than "sexual contact," and the term sexually transmitted diseases is a misleading description for a potential health hazard to the prosthetic and orthotic

field. The chances of someone in this field contracting a venereal disease are not remote, and because the untreated results can be devastating to our personal lives (i.e., embarrassment, deformity, and even death), a keen awareness must be developed and the necessary precautions taken.

For more information on this subject, I suggest you contact your personal physician, your county health department, or the National V.D. Hotline (1-800-227-8922).

AUTHOR

Steven D. Prock, C.P.O., is owner of the Texoma Health Care Center, Inc., 120 S. Crockett, Sherman, Texas 75090.

REFERENCES

- ^{1,5,9}Bruner, Lillian Sholtis, R.M., et al., *The Lippencott Manual of Nursing Practice Third Edition*, pp. 802, 808.
- ²Seligmann, Jean, "A Nasty New Epidemic," *Newsweek*, February 1985, p. 73.
- ³Felman, Yehudi M., M.D., and Axel W. Hoke, M.D., *Wellcome Atlas of Sexually Transmitted Diseases*, p. 46.
- ^{4,7,8}Thomas, Clayton L., M.D., *Tabor's Cyclopedic Medical Dictionary*, Edition 12, pp. S-148, 149, V-17, G-39.
- ^{6,10}Gause, Ralph W., M.D., "Sexually Transmitted Diseases, Part II," *American Baby*, (January, February 1985), XLVII:22.

BIBLIOGRAPHY

- Seligmann, Jean, "A Nasty New Epidemic," *Newsweek*, (February 1985).
- Bruner, Lillian Sholtis, R.M., et al., *The Lippencott Manual of Nursing Practice Third Edition*, Philadelphia: J.B. Lippencott Co., 1982.
- Gause, Ralph W., M.D., "Sexually Transmitted Diseases, Part I & II," *American Baby*, (January 1985, February 1985).
- Thomas, Clayton, L., M.D., *Tabor's Cyclopedic Medical Dictionary*, Edition 12, Philadelphia: F.A. Davis Company.
- Felman, Yehudi M., M.D., and Axel W. Hoke, M.D., *Wellcome Atlas of Sexually Transmitted Diseases*, Research Triangle Park: Burroughs Wellcome Co., 1985.

ACKNOWLEDGMENT

Many thanks to Minaxi Rathod, M.D., Infectious Diseases, for her aid, comments, and critique of this article.