

CONSIDERATIONS:

1. Diabetic foot ulcers are the leading cause of non-traumatic amputations.
2. While performing an initial comprehensive foot exam, provide education about what you are looking for and why. The foot exam is an excellent “teachable moment”.
3. “Foot Care for People with Diabetes” is an excellent patient education resource for teaching patients the principles of daily foot care to reduce amputations.
4. Annual foot testing with a monofilament is recommended to identify patients with diabetes at risk for foot ulcers, which can lead to amputation.

EQUIPMENT:

Gloves

Adequate lighting, i.e. floor or table lamp

Monofilament device

Alcohol prep pad or antiseptic towelette

PROCEDURE:

1. Adhere to Standard Precautions and explain the procedure to the patient and caregiver. Include family in procedure and teaching to facilitate proper care of patient's feet.
2. Assess the patient's history of foot problems:
 - a. Any previous problems, i.e., corns, calluses, open areas
 - b. Previous treatment for problems
 - c. Any changes in the feeling in the feet, such as pain, numbness, or tingling, or change in muscle strength
3. Remove footwear; determine how well the patient can access his/her feet:
 - a. Determine if patient can visualize whole foot including bottom and between toes
 - b. Assess patient's or caregiver ability to wash and provide lotion to feet
4. Don gloves and assess the patient's everyday footwear for torn linings, foreign bodies, breathable material, abnormal wear patterns and proper fit:
 - a. Instruct patient to wear shoes or slippers and to avoid going barefoot
 - b. Inspect the inside of the patient's shoes for areas of potential friction or pressure
 - c. Assess for tightness of shoes. Shoes should allow for changes in size during the day
5. Inspect patient's socks:
 - a. Socks should be clean
 - b. Tops of socks should not be so tight to cause restriction
 - c. Suggest that patient wear white or light colored socks so any drainage is easy to see
 - d. Instruct patient and/or caregiver to monitor socks for blood or other for drainage
6. Inspect the patient's feet and legs on admission, resumption of care, and at every visit if high risk category is determined:
 - a. Assess for dryness and any abnormalities
 - b. Assess for cracks or pressure areas to heel and between the toes
 - c. Feel the legs and feet for temperature changes (excessive warmth or dryness). Note the differences from one leg to the other
 - d. Reinforce the need to inspect feet daily
7. Assess legs and feet for signs of circulatory compromise:
 - a. Note hair growth pattern on legs, skin color changes and dry skin
 - b. Palpate for pedal pulses:
 - i. Dorsalis pedis pulse
 - ii. Posterior tibial pulse
8. Assess patient's toenails:
 - a. If toenails exhibit thickening, fungal infection, ingrown corners and/or are misshapen, refer patient to podiatrist
 - b. Instruct patient to keep toenails trimmed straight and smooth. Patient should trim nails after bath or shower
9. Sensory screening using monofilament:
 - a. Explain monofilament device to patient and/or caregiver and how it will be used on patient's feet
 - b. Demonstrate that the monofilament is flexible and not sharp by using it on the patient's arm or hand
 - c. Instruct patient to look away and respond “yes” when feeling the filament touching the feet
 - d. Apply the filament perpendicular to the skin. Increase the pressure until the filament bends into a “C” shape. Apply filament for 1 to 2 seconds at each site. (*see Addendum – Screening Tool for Diabetes Foot Exam*)
 - e. If the patient does not respond go to other areas, return to the non-responsive area for a repeat application
 - f. Do not:
 - i. Drag the monofilament
 - ii. Make repetitive contact with the same areas
 - iii. Use the monofilament on ulcers or calluses
 - g. Note sites that lack sensation. Lack of sensation on one site categorizes patient as high risk. Documentation of risk is addressed in “Aftercare” procedure below
 - h. Remove gloves and wash hands. Clean monofilament with alcohol prep pad and return to envelope. Repeat hand wash.
 - i. Determine the patient's risk for ulceration based on visual and sensory exam. (*See Addendum - Screening Tool for Diabetes Foot Exam*)
10. Reinforce instructions provided.

AFTERCARE:

1. Document in patient's medical record:
 - a. findings of foot exam, including skin integrity of legs/feet, pulses, patient's subjective information
 - b. Instructions given to patient/caregiver and ability to teach back
 - c. high risk or low risk feet for foot ulcerations/amputations in call log
 - d. Physician notification, response and orders received, as appropriate
 - e. Coordination with other disciplines as appropriate
2. Report to physician abnormal findings, signs/symptoms of infection, and potential for ulceration.

REFERENCE:

- American Diabetes Association (2012). Standards of Medical Care in Diabetes—2012. Diabetes Care. Retrieved May 24, 2012 from http://care.diabetesjournals.org/content/35/Supplement_1/S11.full
- Clinical Practice Guideline for the Diagnosis and Treatment of Diabetic Foot Infections. Retrieved May 24, 2012 from <http://cid.oxfordjournals.org/content/54/12/1679.full.pdf+html>
- HRSA (n.d.) Lower Extremity Amputation Prevention (LEAP). Retrieved on June 7, 2012 from <http://www.hrsa.gov/hansensdisease/leap/index.html>.
- Lipsky, B.A., Berendt, A.R., Cornia, P.B., Pile, J.C., Peters, E.J., Armstrong, D.G., Deery, H.G. et al, (2012). 2012 Infectious Diseases Society of America.
- Singleton, J., Bixby, B., Russell, J., Feldman, E., Peltier, A., Goldstein, J., Howard, J., Smith, A. (2008). The Utah Early Neuropathy Scale: A Sensitive Clinical Scale for Early Sensory Predominant Neuropathy. Journal of the Peripheral Nervous System, 13(3). P 213-227.
- Novo Nordisk Pharmaceuticals, Inc, patient education handout "Foot Care for People with Diabetes", 10/2001

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