Systemic lupus erythematosus and nursing care

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Systemic Lupus Erythematosus

Lupus, Latin for wolf, was the term chosen by physicians in the early 19th century to describe a relatively rare condition characterized by a distinct rash on the face. Erythema, or redness, was combined with the wolf description to coin our current term for the illness known as systemic lupus erythematosus (Tretheway, 2004). This disease has since been characterized by diagnostic challenges, unpredictable progression, and periods of remission and exacerbation. Despite all of its mysteries, there remains interventions that can assist patients to lead high quality lives while still living with lupus. Understanding the disease process is instrumental in providing high quality nursing care to those with systemic lupus erythematosus.

Systemic lupus erythematosus (SLE) is one of three types of lupus distinguishing itself from both discoid lupus (affecting only the skin) and drug induced lupus, which is often reversed after the pharmacological agent in question is discontinued (Bauer, 2013). Brown (2006) describes the disease as “…a chronic autoimmune disease of unknown etiology characterized by inflammation that can lead to multisystem damage” (p. 4). This unknown cause makes SLE especially frustrating, as risk factors remain ambiguous in relation to the known pathophysiology. Genetic, environmental, and hormonal influences could attribute to an individual’s likelihood of developing SLE. For instance, Bauer (2013) found “ estrogen metabolism as an indication of Lupus susceptibility as pregnancy increases the frequency of flares, and flare episodes can be timed with the menstrual cycles of many

patients” (p. 149). The known risk factors currently recognized include being female in gender, of childbearing age, and having a family history of SLE. Other factors are possibilities, but appear to offer more slight correlation than cause and effect (Brown, 2006). Since SLE is categorized as an autoimmune disorder, it follows patterns similar to diseases with widespread inflammation, many of which are rheumatic in nature. In Lupus, normal tissues are mistaken for foreign bodies. In other words, the typical reaction of antibody formation as a response to a virus or bacteria instead occurs from healthy tissue. The resulting formation is an autoantibody, which in turn accumulates in tissue (Bauer, 2013). These autoantibodies become significant for diagnostic purposes later on. However in terms of physiology, the exact reasons for the widespread inflammation of connective tissue (or the rheumatic nature) of SLE remains a mystery.

As previously stated, diagnosis of lupus is a unique challenge for healthcare providers. The reasons are plenty- SLE can fade into remission for long periods, prompting patients into avoiding medical intervention. In addition, testing for lupus can be ambiguous at best with high costs, and the symptoms for the disease tend to mock other autoimmune conditions. For instance, recognizable symptoms include malaise, prolonged fever without infection, anemia, a rash over the cheeks and nose, and arthritis (Rooney, 2005). Many mistake the rash for rosacea and may not seek medical help for the other symptoms until complications that are more serious arise. When lupus is either untreated or poorly managed, complications can quickly arise. These include psychiatric abnormalities like psychotic episodes or personality changes, inflammation of the heart (pericarditis, endocarditis or

myocarditis) inflammation of blood vessels (vasculitis), often nephritis, and eventual renal failure (Bauer, 2013). It is important then, for individuals to not only seek medical help when presented with initial signs of lupus, but also for a diagnosis to be made using advanced testing if needed. Tests for lupus include a complete blood count, urinalysis, ESR, C-reactive protein test and an ANA titer (Bauer, 2013). These findings look for anemia, casts in the urine indicating renal dysfunction, general inflammation, and autoimmune etiology. It should be noted that many tests will be positive for most lupus patients but will test positive for other diseases as well, making the process involved for both practitioner and patients alike. Testing that more accurately isolates a lupus diagnosis may only be positive for a small percentage of SLE patients (Ferenkeh-Koroma, 2012).

It is important for patients to understand that lupus is a chronic condition, and that treatments will vary and may need frequent changes. Bauer (2003) explains the goals of treatment as symptom centered, often oriented toward reducing flares. First line treatment for mild to moderate lupus is the use of NSAIDs (Brown, 2006). These medications are generally well tolerated but patients should still be taught that they are at an increased risk for bleeding and need to take these medications with food. Another course of treatment, generally for more moderate to severe lupus with multi-system involvement is corticosteroid use. These medications completely reduce/eliminate the inflammatory immune response in the body and come with a host of side effects. Monitoring for blood pressure, weight, or skin integrity changes is vital. Teach patients never to discontinue use of these medications without tapering with a physician’s order. Due to their steroid sparing effects,

Ferenkeh-Koroma (2012) mentions anti-malarial medications or a chemotherapy agent like methotrexate as an alternative option during a lupus flare. These treatments can be beneficial in reducing steroid use and are still able to lower the widespread inflammation caused by lupus.

Nursing Process

Nursing care for lupus is significant in that it assists patients in maintaining their quality of life and keeping symptoms to a minimum. The initial nursing assessment for an individual with lupus or suspected of having lupus should include questions regarding activity level to evaluate fatigue, and the impact it may have on the individual; including their mood and quality of life. Other questions should pertain to diet and exercise routines, patient understanding of ordered tests and medications, and then a physical assessment. For a patient with SLE, physical changes such as mucus membrane abnormalities, pallor, skin lesions or rashes, or complaints of joint pain or malaise should be noted. Vital sign changes may only appear in relation to individualized disease flare-ups. Low grade, long lasting fever is common in lupus patients and should be assessed frequently. Other specific assessments will vary depending on the individual’s case of lupus. One where valvultis is suspected should be asked about abdominal pain, for example.

Nursing Diagnoses

A nursing care plan for a patient with SLE could include diagnoses such as activity intolerance or fatigue in regards to the common lack of energy, risk for infection in the case of many therapies, or powerlessness pertaining to the incurable and unpredictable nature of chronic, systemic lupus. It is

important to identify each pertinent nursing diagnosis for a SLE patient so as to best assist them.

Fatigue is one diagnosis that applies to SLE, as does activity intolerance. These are both related to the lack of energy felt by SLE patients usually displayed by their own vocalization, but also through clinical judgement when changes in their activity level becomes evident. Another diagnosis that applies is risk for infection, not necessarily when lupus is in remission or treated with NSAIDs only, but often when treatments that are more extensive are needed. Examples include medications with immunosuppression as a side effect, such as methotrexate or corticosteroid use. Lastly, powerlessness is a nursing diagnosis that applies to many lupus patients due to the tumultuous nature of the disease. As unpredictable symptoms arise, loss of control may be present and it is important that nurses address this to preserve quality of life.

Interventions

The interventions nurses can implement depend on the applicable diagnosis and each individual case of lupus, but Ferenkeh-Koroma (2012) argues that activity planning is particularly helpful for SLE patients suffering from a lack of energy. Planning the activities and including time for rest so as not to set expectations too high can help. For a patient who may be immunocompromised teaching needs to be performed so they are aware to avoid crowds, possibly wearing a mask or have others do so, and to be weary of food borne illness (Rooney, 2005). Lastly, in the case of powerlessness, a nurse can encourage a patient to take control of what factors they can. For

SLE this means keeping stress levels low, possibly through deep breathing, meditation, or regular exercise. To prevent cardiovascular effects of the disease, Brown (2006) advices nurses in encouraging patients to follow either a Mediterranean diet or a heart healthy plan. Even outside of powerlessness, it is important to encourage patients with SLE to partake in a balanced diet and exercise routine to minimize complications of the disease later on.

Conclusion

In conclusion, nurses have a great responsibility to patients with systemic lupus erythematosus. Since this disease is troubling to diagnose, treat, and predict, it is even more important for nurses to assist with patient education. Teaching about treatments, tests, symptoms to check for, and healthy lifestyle choices could dramatically improve a patient's quality of life, even with such a challenging autoimmune disorder. Where medicine may fail, lifestyle changes, emotional support, and consistent care can greatly improve quality of life for a patient with a systemic lupus erythematosus.

References

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