Case Study on Systemic Lupus Erythematosus

ABSTRACT

Systemic lupus erythematosus (SLE) is a chronic, multisystem, autoimmune disease of the connective tissues and blood vessels characterized by inflammation in potentially any body tissue its course and symptoms are variable and unpredictable with mild to life threatening complications. The cause of SLE is not known. It appears from a complex interaction of genetics with an unidentified trigger that activates the disease. Suspected trigger include exposure to ultraviolet light, estrogen, pregnancy, infections and drugs. Genetic predisposition to SLE is evidenced in an increased concordance rate in twins (tenfold), increased incidence within family members (10% to 16%).

KEYWORDS SLE chronic, multisystem, autoimmune disease, inflammation

CASE STUDY

Ms. X 12-years old girl, presented with a history of joint pain, erythematous butterfly rash, photosensitivity, mucocutaneous ulceration, (oral ulcer) fever, fatigue, weight loss, anorexia. Since one month. Ms. X had a past history of joint pain, fever on and off since 2 years and also complained of on and off erythematous butterfly rash. There is no family history of SLE. After the physical examination child met 5 clinical manifestations, out of 11 diagnostic criteria of the American college of Rheumatology (ACR) for SLE. In blood report, child was having elevated cholesterol level, and in urine report, child was having 3–4 pus cells, finally the child was diagnosed as SLE.

INCIDENCE

SLE is more common in girls with an approximate 5:1 female to male ratio, typically occurs between the ages of 10 and 19 years. The disease affects Africans, Americans and Asians more often than people other races.

ETIOLOGY

The exact cause of SLE is not known. But some suspected triggers that activates the disease.

PATHOLOGY

In SLE, autoantibodies react with the child’s self antigens to form immune complexes. The immune complex accumulated in the tissues and organs, causing an inflammatory response resulting in vasculitis. Decrease or altered circulation in the tissues leads to potential for alterations or damage to tissue anywhere in the body. The common affected or involved systems are (cutaneous, hematologic, musculoskeletal, renal, (GIT, etc).

Managements

a. Therapeutic Management
b. Nursing Management

A. Therapeutic Management Focuses on Treating the Inflammatory Response

Nonsteroidal anti-inflammatory drug such as ibuprofen is useful for arthritis.
Corticosteroids drug such as prednisone, hydrocortisone is useful for control the inflammation. Antimalarial agents is useful for rash & arthritis. Immunosuppressive agents such as cyclophosphamide is used renal complication and antihypertensive, aspirin & antibiotics for treating or avoiding the complication.

Ms. ‘X’ had received - Ibuprofen 200 mg, Methylprednisolone 1 g IV bolus for three days, Ceftriaxone 1 gm IV Bd.

**NURSING MANAGEMENT**

**Managing Pain & Maintaining Mobility**

Assessed patients were general fatigue level, presence of depression anxiety other stressor, helped the child to develop an energy-conserving plan for completing daily and other activities and work. Suggest planning for reperiod. child was allowed to get 8–10 hours of sleep at night. Administer medications as prescribed to control inflammation & prevent disease.

**Reduce the body temperature**

Assessed the body (T - 100°F), administered antipyretics as ordered, encouraged more fluid intake, administered antibiotics as per order.

**Preventing & monitoring for complications**

Teach facilities to apply sunscreen (minimum SPE 15) to prevent rashes resulting from photosensitivity. Instruct the child & family to protect against cold weather by wearing warm sock & gloves when outdoor in the winter. Inspect the fingers and toes for discoloration. Watch for development of nephritis by evaluating B. P, Sr. BUN and creatinine levels, urine output & monitor for hematuria or proteinuria while routine checkup. Ensure that yearly vision screening & ophthalmic examination to preserve visual functions.

**Lupus diet and nutrition**

Encouraged for a well-balanced diet that includes plenty of fruits, vegetable and whole grains. Also include moderate amounts of meats, poultry, fish. Avoid chilly and spicy food & advised to parents and child to eat small and frequent diet.

**SUMMARY**

Dealing with the diagnosis of a lifelong, unpredictable and relapsing remitting disease in children is challenging for SLE patients and recognition of the specific needs of this age group is important for optimal outcome.
CONCLUSION

Child and mother advised to use moist heat for pain management of joint pain for no more than 15 mts twice daily. Advised warning signs of thrombosis or blood clot include swelling in the leg, pain cramping soreness in your calf.

REFERENCES