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Case Report on Management and outcome of Hodgkin's Lymphoma

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Abstract: -

Introduction: In 1832 the great British pathologist Thomas Hodgkin published an autopsy case series of individuals with lymphadenopathy and spleen enlargement, which became known as Hodgkin disease. The term 'Hodgkin lymphoma' did not gain popularity until the late 1990s, when knowledge of the entity as a cancer developing from germinal centre or post-germinal centre B cells became clear. **Main symptoms and/or important clinical findings:** A 11 year's old male child admitted in AVBR Hospital with chief complaints of swelling on right side of neck since 10 Months. On physical examination, swelling was found on right side of neck. **The main diagnosis, therapeutics, and outcome:** After physical examination, investigation and diagnostic procedure i.e. biopsy, doctor detected a case of Hodgkin's lymphoma. Medical management was given to the patient i.e. Chemotherapy drug, to reduce a symptoms of Hodgkin's lymphoma. **Conclusion:** Early detection and proper investigation is very important. Proper treatment can cure the disease and life is secure.

Keywords: Management, Hodgkin's Lymphoma, Biopsy, Chemotherapy

Introduction:

In 1832 the great British pathologist Thomas Hodgkin published an autopsy case series of individuals with lymphadenopathy and spleen grow abnormally, which became called as Hodgkin disease.[1]. The term 'Hodgkin lymphoma' did not gain popularity until the late 1990s, when knowledge of the entity as a cancer developing from germinal center or post-germinal center B cells became clear.[2]. Hodgkin lymphoma is thought to account for around 10% of lymphoma that has only recently been discovered cases in the USA (8,260 out of 80,500), with the rest being Non-Hodgkin lymphoma. Of the 21,210 projected deaths related to cancer each year, about 1,070 (or 5%) are from Hodgkin lymphoma. United States reported about 0.5% of newly diagnosed cases of cancer and 0.2% of all cancer deaths. However lymphoma is the very common malignancy identified among teenagers (ages 15 to 19), reported for 21% of new diagnoses, almost two-

thirds of which is Hodgkin lymphoma[3]. Hodgkin's lymphoma is an rare cancer that affects near about 24 people per 100,000 each year.[4] The incidence rate of women peaks in their third decade and then drops, whereas the frequency of men is rather consistent after that[4]. In 2017, males are estimated to account for roughly 56% of newly diagnosed HL patients[3]. The median age of diagnosis is 39 years; HL is most commonly diagnosed in people aged 20 to 34, who account for nearly a third of all new diagnoses. The prevalence rates do not seem to vary between white and black Americans (3.1 new cases per 100,000 males) but are about half as much in Asian/pacific islanders (1.6 new cases per 100,000 males) and American Indians/Alaskan natives. The prevalence are also decrease in Hispanic Americans (2.6 new cases per 100,000 gents) as correlate to white/black people. Since the mid-1970s, Hodgkin lymphoma prevalence rates have remained unchanged, but death rates have significantly decreased, from 1.3 cases per 100,000 in 1975 to 0.3 cases per 100,000 in 2014. In the same time frame, the relative 5-year survival of patients with HL has improved from 70% to 85% at all stages of diagnosis[5]. The prevalence rate of Hodgkin lymphoma also high after solid organ transplantation and in patients with a history of autoimmune disease i.e. rheumatoid arthritis (Odds Ratio [OR] = 2.7), systemic lupus erythematous (OR = 5.8) and sarcoidosis (OR = 14.1)[6]. A meta-analysis based on 1,740 individual patient data from 14 controlled adjuvant irradiation clinical studies was recently published, and it's quite useful. Tumor control was improved by 11% in trials comparing radiation added to chemotherapy versus chemotherapy alone (additional radiation therapy design), but overall survival was unchanged. However, trials comparing additional radiation to more chemotherapy (parallel radiation therapy/chemotherapy design) produced more substantial outcomes. If an appropriate number of drug cycles were administered, there was no difference in tumour control between the two groups in the parallel studies, but overall survival was 8% better in the chemotherapy-only patients due to fewer late treatment-related deaths. Only a few particular conditions, such as bulky mediastinal illness, were suggested for adjuvant radiation.[7]

Patient Information:

A 11 years old male child admitted in AVBR Hospital with chief complaints of swelling over right side of the neck since 10 Months.

Present case visited in AVBR Hospital in OPD basis with chief complaints of swelling over right side of the neck since 10 Months

No any past medical history. Patient belongs to nuclear family. And his family belongs to middle class family. He was mentally stable. He is oriented to time, place and person. He maintained a good relationship with family members and hospital staff.

Relevant past intervention with outcome: Present case was visited in MGIMS before 2 mouths for treatment (swelling over right side of neck), but treatment was not took and condition was poor.

Clinical findings: On physical examination, swelling was found on right side of neck.

Timeline: Present case had a history of swelling over right side of neck, and he visited in MGIMS hospital in June 2020 for management. Biopsy was done, in biopsy detect s/o lymphoma. And then follow up to

AVBR Hospital for further treatment. Patient was visited in A.V.B.R. Hospital on OPD basis with chief complaint of swelling over right side of neck for further management

Diagnostic Assessment: During physical examination, swelling over right side of neck was found. All routine blood test was done, in blood test Hb was decrease, RBC was decrease, x-ray and biopsy was done.

No any diagnostic challenges facing during diagnostic assessment.

Diagnosis: After physical examination, diagnostic procedure doctor diagnose a case of Hodgkins lymphoma.

Prognosis: Present case prognosis was satisfied.

Therapeutic intervention: Medical management was provided to the patient. Inj. Adriamycin 25 mg. IV for anti-chemoplast therapy, Inj. Bleomycin 10 units given to treat the cancer

Changes in therapeutic intervention: No any changes in therapeutic intervention.

Follow up and outcomes: Patient had a history of small swelling over right side of neck, and they visited to sewagram hospital. Biopsy was done and detect a case of Hodgkin's lymphoma. Swelling was developed patients was referred to AVBR Hospital.

Discussion: Present case admitted in AVBR hospital with chief complaints of swelling over right side of the neck since 10 Months after physical examination and proper investigation diagnosed a case of Hodgkin's lymphoma. Cancer treatment ok and patient prognosis was satisfactory. So proper treatment is very necessary.

Similar case, according to Goodman and Fuller, "Standard protocols for problems related with malignancy and malignancy treatments encountered by physical therapists do not exist at this time." However, due to the side effects of malignancy, such as cognitive impairments and post-surgical complication such as low range of motion, soreness, disuse, pain, sensory loss, weakness, deep vein thrombosis, and lymphedema, the physical therapist can play a significant role in maintaining health.[8]

Another similar case reported**,** according to new research, physical activity increases physical activity, improves general self-efficacy and mastery, reduces fatigue and misery, and improves quality of life in cancer patients who have completed their treatments. This article also display direct correlation between physical activity and quality of life.[9] Related Cases and studies were reported[10-16].

Conclusion: Proper investigation and proper treatment can cure the disease. And life is secure.

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