**Case Vignette**

A 7-year-old female, Roman Catholic from Cebu consulted due to a slowly enlarging mass in her upper back. 1 month prior to consult patient noted a “calamansi sized” slowly enlarging non-tender non-movable mass on the left upper back. No other symptoms at this time hence no consult done or medications taken. 2 weeks prior to consult, still with note of growth in the mass, patient how has generalized body weakness accompanied by easy fatigability, pallor, undocumented weight loss and muscle pains. Persistence prompted consult

Patient is currently attending school and claims to be able to participate in all school activities including her PE classes. She has no known co-morbidities or any allergies but does not have any regular check-up. Patient has no prior hospitalizations and allegedly has had no other health issues at this time. There was no family history of hypertension, diabetes, asthma or malignancies.

Physical Examination upon initial consult

General survey: Conscious, coherent and not in distress

Vital Signs: BP 100/70, HR 104, RR 18, Temp 37.2, O2 sat 99% at room air

HEENT: Pale palpebral conjunctiva, anicteric sclerae, no palpable cervical lymph node, thyroid not enlarged, (+) gingival hyperplasia, no oral ulcers, non-hyperemic pharyngeal wall, no tonsillar exudates

Chest/Lungs: Symmetrical chest expansion, clear and equal breath sounds bilaterally

Heart: Distinct heart sounds, apex beat left 5th ICS MCL, (-) heaves, thrills or lifts, (-) murmurs

Abdomen: Soft abdomen, normoactive bowel sounds, tympanitic to percussion, no direct or rebound tenderness, Traube’s space not obliterated

Back: (+) 10cm well circumscribed mass on the left scapular area – non-tender, no overlying skin color changes, no discharge

Extremities: Pulses full and equal, no edema, (+) palmar pallor, no jaundice

**Initial Labs done on consult:**

|  |  |
| --- | --- |
| Complete Blood Count  | Result  |
| Hgb  | 92 g/L  |
| Hct  | 30 % |
| MCV  | 90 fl  |
| WBC  | 32.6x109/L  |
| Neutrophils | 20% |
| Lymphocytes | 30% |
| Monocytes | 18% |
| Eosinophil | 1%  |
| Basophil | 0% |
| Blast | 36% |
| Platelet  | 110 x109/L |

Crea 75 umol/L Calcium 1.70mg/dL Albumin 3.1 g/dL K 4.7 mmol/L Uric acid 9.8 mg/dL

LDH 980 U/L Mg 0.79 mmol/L Na 137mmol/L Phos 6.2 mg/dL

Hepa Profile: HBsAG, anti HBs, Anti HAV, anti HCV: non-reactive

**Subsequent Labs done:**

Peripheral blood smear:



Bone marrow aspirate:



Flow cytometry for basic leukemia panel (marrow aspirate): presence of abnormal myeloid blast population positive for the following markers: CD13, CD33, CD34, CD117, MPO, and CD56. Weak positive for CD 19. Negative for CD11b.

Karyotyping (marrow aspirate): 46 XX, t(8;21)(q22;q22)

Biopsy of the left upper back mass: consistent with a myeloid sarcoma