Apollo SPECIALITY HOSPITALS TOUCHING LIVES

24 EMERGENCY 1066

Discharge Summary

Dept. of MEDICAL ONCOLOGY

Day-8/1st cycle of 2nd line salvage chemo

GENERAL INFORMATION

UHID	AC01.0004015332
Patient Identifier	CSNIP124030
Ward/Bed No	FIFTH FLOOR , 5th A WARD,Bed no:1509C
Name	Mr. LEELA PRASAD S
Age	19Yr 1Mth 2Days
Sex	Male
Address	VILL PO-KBRPURAM,PUTTUR, MANDAL,517584,Tirupati (Urban),Andhra Pradesh
Primary Consultant	Dr. RAJA T DM (Oncology) MEDICAL ONCOLOGY
Date of Admission	03-Jun-2022
Date of Discharge	04-Jun-2022
Diagnosis	SMALL CELL OSTEOSARCOMA EWSR1 GENE TEST - NEGATIVE FOR EWSR1 AND FUS GENE REARRANGEMENTS. LOSS OF EWSR1 (22q12) IN TUMOUR NUCLEI SCORED. S/P CHEMOTHERAPY (VAC/IE) S/P SURGERY S/P ADJUVANT CHEMOTHERAPY (ADRIAMYCIN &CISPLATIN) LEFT ABOVE KNEE AMPUTATION - 27.10.2020 S/P SALVAGE CHEMOTHERAPY S/P RADIOTHERAPY(RIB) DISEASE PROGRESSION ON 2ND LINE SALVAGE CHEMOTHERAPY

History of Present Illness

Chief Complaints This 19 years old male had initially presented with complaints of pain associated with swelling

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over lateral aspect left leg for 1 month and was evaluated at hometown.
MRI left leg done on 13.07.2019 showed fibula metadiaphyseal expansile lytic lesion with extent and involvement features suggestive of locally aggressive lesion - ? osteosarcoma.

He came to Apollo Main Hospital for further evaluation and management.
Chest X-ray done on 23.07.2019 showed normal study.

He underwent Open biopsy left fibula head on 24.07.2019 by Dr.Navaladi Shankar A, Consultant Orthopaedic Surgeon.
HPE - Features of a epithelioid neoplasm with osteoid suggestive of an osteosarcoma.
IHC on 07.08.2019 - Malignant small round cell tumour with features suggestive of Ewings / Ewings like sarcoma. Vimentin : positive. CD 99 : positive. FLI-1 : positive. SATB-2 : positive. TLE-1 : focal positivity. C-kit : weak positive.

He came to Apollo Speciality Hospital for further evaluation and management.

PET CT whole body done on 02.08.2019 showed hypermetabolic expansile lytic lesion with soft tissue component in metadiaphysis of left fibula. No other significant metabolically active disease elsewhere in the visualized whole body survey. Imaging features suggestive osteosarcoma of left fibula with no demonstrable regional or distant metastases.

2D Echocardiogram done on 03.08.2019 showed situs solitus, levocardia. Normal systemic and pulmonary venous return. AV / VA concordance. Intact IAS / IVS. Mild tricuspid regurgitation with mild pulmonary artery hypertension(CRVSP- 36mmhg). Mild mitral regurgitation. Normally related great arteries. Tricommisural aortic valve. No aortic stenosis / aortic regurgitation. No LVOT / RVOT obstruction. No coarctation of aorta /PDA. Left aortic arch. Good sized and confluent PA's. Good biventricular function

EWSR1 Gene testing done on 07.08.2019 reported negative for EWSR1 and FUS GENE rearrangements.
LOSS OF EWSR1 (22q12) in tumour nuclei scored.

Patient and family members were explained in detail regarding the disease status, prognosis and planned for Neoadjuvant chemotherapy with Adriamycin and Cisplatin. The cost, course, pros & cons of chemotherapy was explained. They opted for the same.

He was started on 1st cycle chemotherapy with Adriamycin and Cisplatin from August 2019.

He was treated for complaints of loose stools, vomiting and generalized weakness on 12.08.2019.
Patient was treated for ? herpetic lesions in the mouth with oral anti viral and ointment.
He became symptomatically better and was discharge in stable condition on 16.08.2019.

In view of IHC reports showing features of Ewings Sarcoma, Neoadjuvant chemotherapy was

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modified to VAC/IE regimen from 2nd cycle onwards.

He was continued on chemotherapy with VAC/IE regimen for 4 cycles.

Followup PET-CT was done on 25.10.2019. Compared to previous PET CT dated 02.08.2019, there is interval regression in metabolic activity with sclerotic transformation of the lytic lesion in metadiaphysis of left fibula. Associated soft tissue component has resolved. No demonstrable metabolically active disease elsewhere in the whole body survey. Imaging features suggestive of partial response to therapy.

He underwent Excision of proximal 1/3rd fibula + LCL reconstruction (internal bracing)arthrex left knee by Dr. Navaladi Shankar A, Consultant Orthopaedics on 04.11.2019.

HPE from excised specimen reported on 15.11.2019 showed extensive tumour necrosis (around 80%) with patchy residual malignant small round cell neoplasm with tumour osteoid matrix production. Distal medullary (Scoop) resection margins - negative for tumour. The morphological finding of malignant small round cell neoplasm with significant tumor osteoid production in correlation with negative ESWR1 and FUS gene rearrangement study is mostly in favour of Small cell osteosarcoma.

In view of HPE reports showing features of small cell osteoSarcoma, adjuvant chemotherapy was modified to Adriamycin and Cisplatin regimen.

He was continued on chemotherapy with Adriamycin and Cisplatin, completed 8th cycle in January 2020.

Doppler left upper limb veins done on 28.01.2020 showed normal study of the upper limb veins.

PET CT whole body was done on 17.02.2020. Compared to Previous PET/CT dated 02.Aug.2019 showed no lesion in the surgical bed. No significant lymphadenopathy. No demonstrable metabolically active disease elsewhere in the whole body survey.

2D Echocardiogram done on 17.02.2020 showed Situs solitus, levocardia. Normal systemic and pulmonary venous return. Intact IAS. Trivial tricuspid regurgitation. Trivial mitral regurgitation. Intact IVS. Normally related great arteries. Tricommisural aortic valve
Good sized & confluent PA'S. No RVOT obstruction. No pulmonary regurgitation. Left aortic arch. No PDA/ COA. Good biventricular function.

MRI Knee done on 01.10.2020 showed Large ill-defined, infiltrative mass lesion measuring about 8 x 4.8cms showing Two large areas central ossified component and surrounding diffusely infiltrative multi-lobulated soft tissue component seen in the inter and intramuscular plane of previous post operative site at the region of proximal end of the fibula and extending laterally by breaching the fascia and infiltrating the subcutaneous plane and skin of proximal end of lateral aspect of the leg. Lesion is extending medially and closely abutting lateral border

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of the proximal end of the shaft of the tibia and inferiorly up to the proximal end of the postoperative shaft of the fibula. Soft tissue edema in inter, intramuscular and subcutaneous planes proximal and lateral aspect of the leg at previous post operative site. No skip lesions in visualized portions of the distal end of femur and proximal end of the tibia.The above features could represent Recurrence of tumor - Osteosarcoma at previous post operative site representing disease progression.

2D Echocardiogram done on 05.10.2020 showed normal left ventricular systolic function (LVEF-62%). No regional wall motion abnormality. Mild mitral regurgitation, mild tricuspid regurgitation. No clot / PAH / pericardial effusion / vegetation.

PET CT whole body was done on 06.10.2020. Compared to Previous PET/CT dated 17/02/2020, there is interval new FDG avid heterogeneously enhancing hyper dense lesions in the surgical bed – Suggestive of disease recurrence. No other demonstrable metabolically active disease elsewhere in the whole body survey.

Patient and family members were explained in detail regarding the recurrent disease status, prognosis and planned for salvage chemotherapy with High dose methotrexate. The cost, course, pros & cons of chemotherapy was explained. They opted for the same.

He was started on salvage chemotherapy with High dose methotrexate, received 1st cycle on 09.10.2020.

Patient was referred to Dr. Navaladi Shankar, Consultant Orthopaedic Surgeon for persistent left leg pain and increase in size of the swelling and was planned for left above knee amputation.

He underwent left above knee amputation on 27.10.2020 by Dr. Navaladi shankar at Apollo Main Hospital.
HPE - Consistent with recurrent osteosarcoma, left leg (left above knee amputation). Size of tumour: 8x6x6cm and 3.5cm. Skin with underlying soft tissue margins and bone scoop margins, negative for tumour.

He was decided to be continued on salvage chemotherapy, completed 4 cycles in December 2020.

PET CT whole body done on 12.03.2021. Previous PET/CT dated 06/10/2020 was reviewed. Ill-defined sclerosis with adjacent soft tissue thickening in surgical stump of left distal femur – Likely post surgical changes. Marginal increase in size and metabolic activity of ileo-colic and mesenteric nodes- likely non-specific inflammatory in nature. No other demonstrable metabolically active disease elsewhere in the whole body survey.

PET CT whole body done on 12.10.2021. Previous PET/CT dated 12.03.2021 was reviewed. There is post left above knee amputation status with no definite locoregional / stump

recurrence. No other demonstrable metabolically active disease elsewhere in the whole body survey.

2D Echocardiogram done on 12.10.2021 showed normal left ventricular systolic function (LVEF-64%). No regional wall motion abnormality. Trivial mitral regurgitation. Trivial tricuspid regurgitation. Normal chambers and valves. Good RV function (TAPSE-2.0cm). No clot / PAH / pericardial effusion / vegetation. Global longitudinal strain- 18.1%.

He presented with complaints of chest pain over right side for 2 weeks.

2D Echocardiogram done on 07.02.2022 showed normal left ventricular systolic function (LVEF-60%). No regional wall motion abnormality. Normal chambers and valves. Trivial mitral regurgitation. Trivial tricuspid regurgitation. Good RV function (TAPSE-1.7cm). No clot / PAH / pericardial effusion / vegetation. Global longitudinal strain- 19.0%.

PET CT whole body done on 08.02.2022. In comparison with prior PET-CT study dated 12 October 2021 there is post left above knee amputation status with no definite locoregional / stump recurrence. Appearance of FDG avid ill-defined lytic bony lesion in the lateral aspect of right 10th rib. No other demonstrable metabolically active disease elsewhere in the whole body survey.

He underwent excision biopsy of the osteolytic lesion over lateral aspect right 10th rib on 12.02.2022 by Dr.Navaladi Shankar A, Consultant Orthopaedic Surgeon at Apollo Main Hospital.

HPE - Excision of 10th rib, right side showing malignant round cell neoplasm with Epithelioid morphology and osteoid consistent with osteosarcoma, small Cell type. Size of the tumor: 5 x 1.6 x 0.8 cm. Mitotic rate: 38 - 40 / 10 hpf. Necrosis: not identified. Lymphovascular invasion: present. Pleural margins and soft tissue margins are negative for tumour Infiltration. Bone resection margin is positive for tumour infiltration.

Dr. Shankar Vangipuram, Consultant Radiation Oncologist was consulted for opinion regarding radiotherapy, and his advise was followed.

He received radiotherapy a dose of 39Gy in 13 fractions to PTV (right 10th rib) from 26.02.2022 to 14.03.2022.

PET CT whole body done on 16.04.2022. In comparison with prior PET-CT study dated 08.02.2022 there is interval, bilateral pulmonary metastases. Post left above knee amputation status with no definite locoregional / stump recurrence. Post procedural changes in the lateral aspect of the right hemithorax. No other demonstrable metabolically active disease elsewhere in the whole body survey.

Memorial sloan hospital for cancer and allied diseases review of surgical slides done on

06.05.2022 showed high grade osteosarcoma of the fibula with local recurrence and metastases to the rib.

Patient's family members were explained in detail regarding the disease status, prognosis and was planned for chemotherapy with 2nd line salvage chemotherapy with Gemcite and Docetaxel. The cost, course, pros & cons of chemotherapy was explained. They opted for the same.

He was started on 2nd line salvage chemotherapy with Gemcite and Docetaxel from May 2022, now admitted for D8/1st cycle dose with no specific complaints.

No history of bronchial asthma or drug allergy.

GENERAL EXAMINATION

Pulse	86/min.
B.P	120/80 mm of Hg.
CVS	S1S2 +
RS	Bilateral breath sounds +
Abdomen	Soft
CNS	NFND

Course In The Hospital & Discussion

Course in the Hospital:

After adequate hydration and premedication, D8/Ist cycle dose of 2nd line salvage chemotherapy was given on 03.06.2022 with

Inj.Gemcite 1500mg IV in 250ml NS over 2 hours (D1 & D8)
Inj.Docetaxel 110mg IV in 250ml NS over 2 hours (D8 only)
Inj.Pegasta 6mg S/C stat (D9)
(cycle once in 21 days)

Patient tolerated chemotherapy well and was discharged in a stable condition with the following advice.

ADVICE ON DISCHARGE

Diet Normal diet

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