









Govt. of India

छुट्टी की पर्ची Discharge-Slip  
कलावती सरन बाल अस्पताल  
Kalawati Saran Children's Hospital

बंगला साहिब मार्ग, नई दिल्ली-110001  
Bangla Sahib Marg, New Delhi-110001

दूरभाष / Tel. No. : 23344160, 23344162-65

युनिट Unit U<sub>2</sub> 45 सी.आर. नं. C.R. No. 15958

नाम Name: Ayansh Kumar

आयु Age: 2yr 6m लिंग Sex: Male

पता Address: village Narwara Dist: Shivhar Bihar  
843128

भर्ती की तारीख : 15/6/23 छुट्टी की तारीख : 17/6/23  
Date of Admission Date of Discharge

निदान  
Final Diagnosis : Multisystem LCH (HR) , stratum II  
now I febrile illness

Anthropometry  
Wt. at Admission 12 kg Wt. at Discharge \_\_\_\_\_  
Height/Length \_\_\_\_\_ Head Circumference \_\_\_\_\_

Nutritional Status \_\_\_\_\_

Immunisation

BCG

Pentga/DPT/OPV 0 1 2 3 B1 B2

Hep. B 0 1 2 3

Measles / MMR / Typhoid

LADY HARDINGE MEDICAL COLLEGE & SMT. SUCHETA KRIPLANI  
HOSPITAL  
NEW DELHI  
DEPARTMENT OF RADIO DIAGNOSIS

NAME: Ayansh	AGE/SEX: 2y Y/M	REGISTRATION NO: 28787
REFERRED BY: U2C5	CT NO: 131/23	DATE: 9/1/23
CLINICAL DIAGNOSIS: K/C/O Mutisystemic LCH. C/O respiratory distress not responding to antibiotics.		

CECT CHEST

SUBOPTIMAL SCAN DUE TO PATIENT MOTION. CT SCANNING OF THE CHEST WAS OBTAINED AFTER ADMINISTRATION OF INTRAVENOUS IODINATED CONTRAST. NO ADVERSE REACTIONS SEEN. STUDY REVEALS:

FINDINGS IN CHEST

- Bilateral lung fields appear normal.
- Trachea and major bronchi appear normal.
- Mediastinal vessels and cardiac chambers appear normal.
- No mediastinal lymphadenopathy seen.
- No pericardial or pleural effusion seen.
- Chest wall appear normal.

*In the visualised sections of the abdomen, hepatomegaly with linear hypoattenuating areas along the portal tracts ? portal triaditis. Advised USG correlation.*

IMPRESSION: No significant abnormality in chest.

Please correlate clinically

*Shave*  
Consultant

*Flora*  
*9/1/23*  
Dr. Shivani  
Senior Resident

# Department of Pathology

G.B. Pant Institute of Post Graduate Medical Education and Research, New Delhi - 110002 (GIPMER)

Biopsy no: T12790/22

Year: 2022

Name: AYANSH KUMAR

Age: 2

Sex: Male

Referred By: DR NUPUR

CR / OPD No: 28787

Receipt Date: 24-12-2022

Specimen Received:  
T12790/22:Liver biopsy

### Report:

T12790/22:Liver biopsy

Section examined show maintained lobular architecture. Six portal tracts identified show minimal chronic lymphocytic inflammation. No interface activity. Hepatocytes show mild and focally ballooning degeneration with perizonal steatosis amount less than 10 percent. Sinusoids are dilated and infiltrated by histiocytes with groove nuclei, few ill defined granulomas are also seen. Masson Trichrome- No fibrosis  
Orcein- No copper associated protein  
AFB- negative  
On IHC histiocytes cells are CD68 positive in sinusoids.

### Impression:

T12790/22:Liver

Feature are suggestive for histiocytic storage disorders.  
Kindly evaluate for Gaucher's diseases.

Reported by:

*Dr. Puja Sakhuja*  
Dr Puja Sakhuja/Dr RM(SR)

Verified by: Dr. AK

Date of Report: 09-01-2023

### 6.3 Diagnostic Evaluation During Treatment and at Follow-up

The evaluation and the respective intervals and time points during therapy can vary depending on disease severity and treatment, and are therefore specified in the Roadmaps of each therapeutic Stratum (see Appendix A-IV).

The long-term follow-up evaluation scheme after end of systemic treatment is specified in Stratum VII (Section 14). The evaluation scheme is based on the assumption that patients have non-active disease (NAD) at the time being included in Stratum VII. In the case of complaints, signs and/or symptoms suggesting disease reactivation a basic evaluation as described in Section 6.2 has to be performed.

### 6.4 Definition of Organ Involvement

#### 6.4.1 Risk organs

The definition of risk organs in the LCH-IV protocol is different from that of the previous study, since lung will no longer be considered a risk organ. The reason is the frequent association of pulmonary involvement with involvement of other risk organs, the low relative hazard ratio in a multivariate analysis, and last but not least, the very difficult and subjective evaluation of disease activity and therapy response in this organ.

A patient is considered to have risk organ involvement if at least one of the risk organs is involved. The current definition of involvement of the risk organs is presented in Table V.

Table V: Definition of Risk Organ Involvement

Hematopoietic involvement: (with or without bone marrow involvement*)	At least 2 of the following: <ul style="list-style-type: none"> <li>• anemia: hemoglobin &lt;100 g/L (&lt;10 g/dl), infants &lt;90 g/L (&lt;9.0 g/dl), not due to other causes e.g. iron deficiency</li> <li>• leukocytopenia: leukocytes &lt;4,0 x 10<sup>9</sup>/l (4,000/μL)</li> <li>• thrombocytopenia: platelets &lt;100 x 10<sup>9</sup>/l (100.000/μL)</li> </ul>
Spleen involvement:	• enlargement >2 cm below costal margin in the midclavicular line**
Liver involvement:	• enlargement >3 cm below costal margin in the midclavicular line** and/or • dysfunction (i.e. hypoproteinemia <55 g/L, hypoalbuminemia <25 g/L, not due to other causes and/or • histopathological findings of active disease



# Department of Pediatric Cardiac Sciences Sir Ganga Ram Hospital



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KD 808

11/23  
Kalewotopu

Ayomn  
2ys 1 male

Echis

Normal study

NO MR / TR

NO PDA

GOV BV / TR

Normal

A bone lesion with contiguous soft tissue involvement is considered a lesion.

Table X: Clinical classification of LCH

Disease categories:	Definitions:
Single System LCH (SS-LCH)	<p>One organ/system involved (uni- or multifocal):</p> <ul style="list-style-type: none"> <li>Bone unifocal (single bone) or multifocal (&gt;1 bone)</li> <li>Skin</li> <li>Lymph node (not the draining lymph node of another LCH lesion)</li> <li>Lungs</li> <li>Central nervous system</li> <li>Other (e.g. thyroid, thymus)</li> </ul>
Multisystem LCH (MS-LCH)	<p>Two or more organs/systems involved</p> <p>With or without involvement of "Risk Organs" (e.g. hematopoietic system, liver, spleen)</p>

### 6.7 Stratification for the First-Line Therapy

Patients with indication for systemic therapy are stratified at diagnosis into two groups:

#### 6.7.1 GROUP 1 - Multisystem LCH

- Two or more organs/systems involved, with or without involvement of "Risk Organs" (e.g. hematopoietic system, liver, or spleen)

#### 6.7.2 GROUP 2 - Single-system LCH

- isolated "CNS-risk" lesion
- multifocal bone lesions (MFB)

① Liver + <sup>10cm</sup> (ALB=1.9, P=4.4)

② Spleen + 9cm

③ Cytopenia (+) - BM report ~~involved~~ <sup>BM</sup> NOT Involved (lytic skull)

④ Skeletal survey - ~~involved~~ (+)

⑤ Skin biopsy → 8% LCH (IHC wanted) & present

⑥

LCH-IV, Version 1.0, April 30, 2019

Re-assessment - after 1c-I

(Plan to start - 1c-2)

- No Cytopenia
- Skeletal survey - Skull lesion & slightly reduced
- Liver - 7cm
- Spleen - 6cm

# BIOCHEMISTRY SHEET

NA/K	UR/CR	BIL(T/D/I)	OT/PT	ALP	URIC ACID	CA+2	IP
30/4	30.8/0.4	1.85/1.18	118/53	1913		4.2	4.9
41/4.3	23/0.12	2.95/2.02	122/54	1711		4.1	3.78
	37/0.28	-	-		3.1	-	3.8
134/4.2	22/0.1	4.63/2.99	96/60	1555		-	-
	-	-	-	-	-	-	-
2	136/4.7	23/0.2	1.2/1.2	79/86	725	8.0	3.8
2	135/4.5	13.6/0.05	1.41/0.65	73/40	857	2.3	9.0/4 3.77
12	134/4.8	26/0.26	1.5/0.96	62/170	718	2.0	8.4/4.8 4.6
112	134/4.9	25/0.29	1.2/0.8	40/111	549		8.4/5.0 3.7
112	140/4.6	29/0.10	0.95/0.48	28/76	652	0.95	9.4/5 4.1
3/12		21/0.21	0.9/	41/93	581	2.4	8.4
27/12	129/4.2	21/0.30	0.72/0.56	10/51	406	2.2	8.1/4.3 3.9
29/12	135/4.4	21/0.32	0.7/0.4	25/25	287	2.4	8.1/5.0 4.2
30/12	132/5.0	21/0.72	0.4/0.3	15/18	368	2.0	2.5/4.7 4.1
31/12	136/4.8	22/0.35	0.44/0.35	21/27	360	2.0	8.3/5.2 3.0
2/1	134/5.0	13/0.1	0.5/0.2	27/44	447	2.9	11.1/5.0 2.1
2/1	132/4.4	22/0.3	0.6/0.3	29/59	300	2.4	9.2/4.7 2.1
4/1	136/4.3	17/0.2	0.3/0.1	13/24	210	3.8	4.7/4.0 4.1
6/1	136/4.7	22/0.12	0.4/0.18	30/55	261	-	8.4 4.1
7/1	138/4.4	28/0.10	0.29/0.15	45/121	265		10/4.5 4.1
10/01	136/4.9	32/0.07	0.4/0.22	23/109	239	2.3	-/4.0
11/01	138/4.5	26/0.15	0.45/0.22	21/81	206	-	-
12/1	134/4.0	35/0.15	0.80/0.49	46/49	209	7.3	4.7-6
13/1/23	141/4.6	25/0.15	0.08/0.27	15/76	200		4.8
14/1/23	157/3.8	31/0.18	0.39/0.21	50/50	230	3.9	4.8
15/1	189/4.5	33.8/0.15	0.37/0.23	21/51	215	3.0	15.1
16/1	157/4.4	12.5/0.13	0.35/0.19	32/77	243	3.3	3.8

cellulose (100%)  
(C<sub>6</sub>H<sub>10</sub>O<sub>5</sub>)<sub>n</sub> + H<sub>2</sub>O + H<sup>+</sup>

Agarose  
methyl  
Sulfolignosyl phosphate

2g / 100 ml

0.4% 0.1% 0.5% 0.4%

0.2-0.3  
0.0-0.1  
-0.1

ENCLOSURE

7.3 months

(+)

MEMO

(+)(+)

- 1. Name
- 2. Date
- 3. Location
- 4. Time
- 5. Weather
- 6. Observations
- 7. Remarks

Memorial Department of Neurology

Page 1

NAME  
AGE  
SAMPLE  
DATE  
RECD



Department of Nuclear Medicine and PET  
All India Institute of Medical Sciences, New Delhi, India.

<sup>18</sup>F-FDG WHOLE BODY PET-CT STUDY

Patient Name: AYANSH KUMAR		Age/Sex: 2Y/M
Study ID: FDG/23492/23	UHID:106391315	Date: 11.04.2023

Indication: Multisystem LCH, post Vinblastine (last-18.03.2023). PET-CT for disease status.

after  
station  
2

Procedure: PET-CT acquisition was done 60 minutes after injection of 10mCi <sup>18</sup>F-FDG by intravenous route, from the level of orbits to mid-thigh. CT was done for attenuation correction and anatomical localization.

**PET-CT Findings:**

Head and Neck: Increased tracer uptake noted in bilateral palatine tonsils with few sub-centimetric bilateral cervical lymph nodes - infective. Visualized paranasal sinuses, skull base, pharynx, larynx and thyroid do not show any abnormality on CT.

Thorax: Few sub-centimetric bilateral axillary lymph nodes noted with preserved fatty hilum. Few paratracheal, prevascular, AP window, subcarinal and bilateral hilar lymph node noted, some of them showing calcifications, with no significant tracer uptake - likely infective. Physiological FDG uptake is seen in the myocardium. Lungs, large airways, pleura, heart, great vessels and other mediastinal structures appear normal on CT.

Abdomen-Pelvis: Hepatomegaly noted (CC span ~11cm) with mild FDG uptake and dilated intra-hepatic biliary radicles. Few sub-centimetric bilateral inguinal lymph nodes noted with preserved fatty hilum. Normal FDG distribution is noted in the liver, spleen, kidneys, gastrointestinal tract and urinary bladder. Biliary ducts, spleen, kidneys, stomach, adrenals, pancreas, retroperitoneum, bowel and urinary bladder appear normal on CT. ascites is noted.

Musculo-Skeletal System: FDG avid lytic lesions with soft tissue component noted in bilateral skull and facial bones. Opacification noted of right mastoid air cell. Physiological FDG distribution is seen rest of the visualized axial and appendicular skeleton.

**IMPRESSION:**

- Metabolically active lytic lesions in bilateral skull and facial bones with right mastoid involvement-residual disease.
- No previous PET-CT available for comparison.

NAME  
AGE  
SAMPLE  
DATE  
REGD

Card Print

[http://192.168.93.10/patho/report/histo\\_report\\_reprint\\_result](http://192.168.93.10/patho/report/histo_report_reprint_result)



**Department Of Pathology**  
**All India Institute Of Medical Sciences**  
**Delhi**

Tel: +91-11-26588500/26588700 Fax: +91-11-26588500/26588700

Patient Name:	Ayansh Kumari	Acc. No.	2252872
F/H Name:	Mukesh Kumar	Hosp. Reg. No.	106391315
Age/Sex:	2 Y/Male	UHID No.	---
Clinic/Dept/Unit:	Skin OPD/Unit 1	Consultant Incharge:	Dr. N/A
Reg Date:	13-12-2022	Reporting Date:	22-12-2022

**Histopathology Report**

**Report Findings:**

Received two specimens .  
1) Skin biopsy of chest papule shows unremarkable epidermis . At one end there is proliferation of langerhan cells abutting the epidermis with few eosinophils  
Papillary dermis shows localised collection of langerhan cells histocytes  
2) Skin biopsy of back shows similar features with excess of langerhan cells These cells are positive for of CD1a, S100 and langerin  
Overall features are suggestive of langerhan cell histocytosis

Reporting Incharge: Dr. Sudheer Arava

Reporting SR: Dr. Priya Jayakumar  
Verify By: Dr. Priya Jayakumar

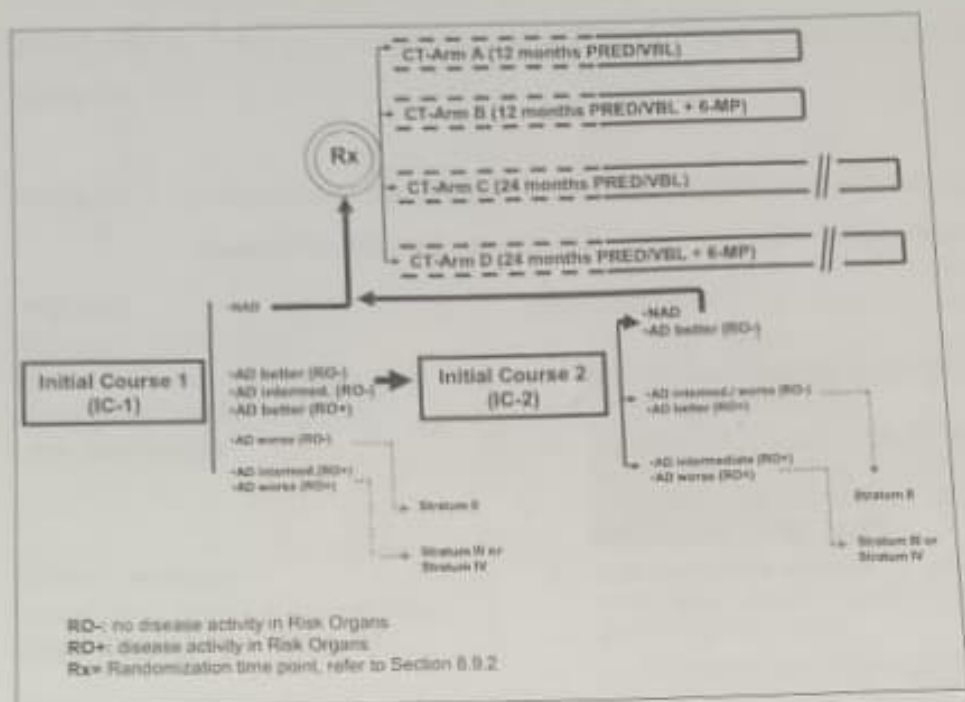


Figure 8. Stratum I: Overall therapy plan for Group 1 (MS-LCH)

#### 8.4.1.1 Group 1: Initial Treatment

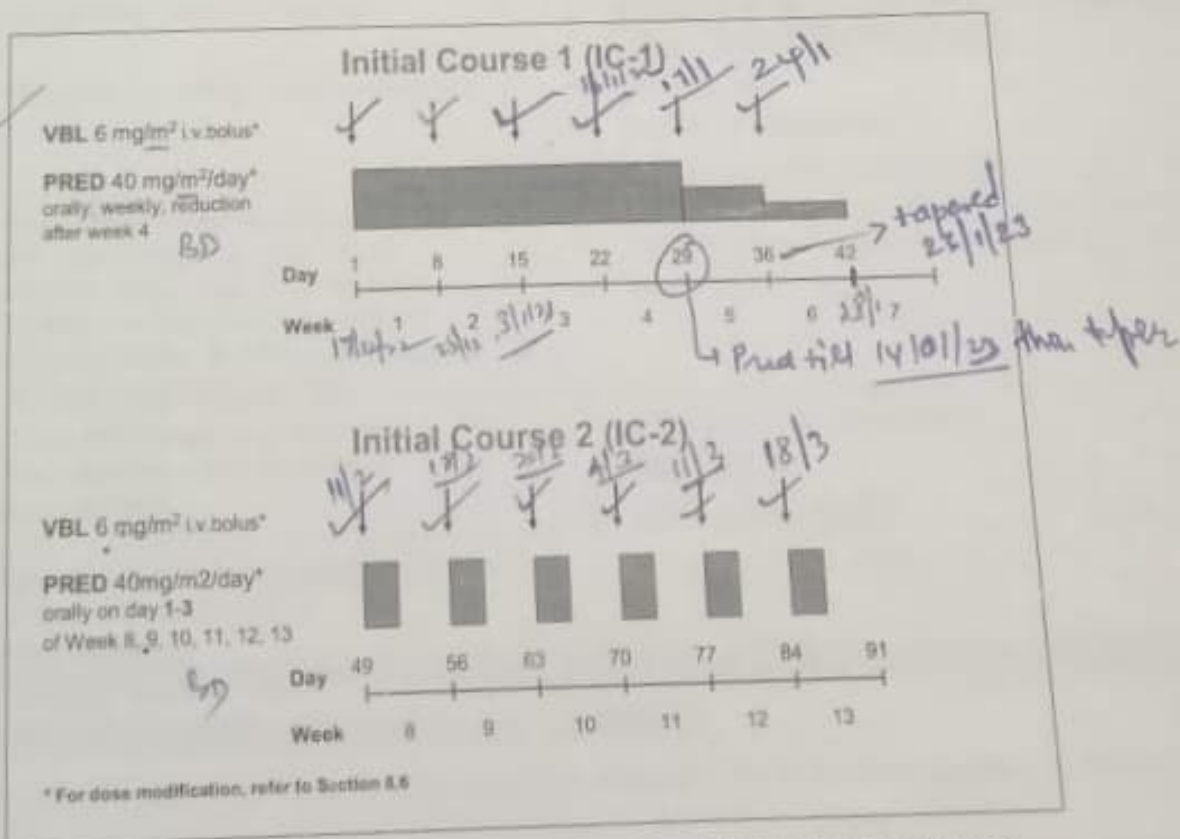


Figure 9. Stratum I: Initial Course 1 (IC-1) and Initial Course 2 (IC-2)

Features of 2nd line active therapy

Myeloid  
 4-10%  
 10-15%  
 20-30%

	2/1	2/2	2/3	2/4	2/5	2/6	2/7	2/8	2/9	2/10	4-10%	10-15%	20-30%
Week	1	2	3	4	5	6	7	8	9	10	11	12	13
Day	1	4	15	22	29	36	43	50	57	64	71	78	85
Methotrexate													
140mg/m <sup>2</sup> /d (D5)													
Cytarabine		↑↑↑↑		↑↑↑↑		↑↑↑↑		↑↑↑↑		↑↑↑↑		↑↑↑↑	↑↑↑↑
1000mg/m <sup>2</sup> /d (D1-5)													
Fluorouracil		↑		↑		↑		↑		↑		↑	↑
500mg/m <sup>2</sup> /d (D1-5)													
Granulocyte colony-stimulating factor (G-CSF)													

→ 4-10% → 10-15% → 20-30%

25/7/22 - S-bul → (Dine) → 1.57mg/d  
 Full Dose Vinorelbine given  
 cytokines



# KALAWATI SARAN CHILDREN'S HOSPITAL, NEW DELHI

## (CONSENT FORM)

मुझे अपने बच्चे AYANSH की बिमारी LCH (multi-system)

के बारे में अपनी मातृ भाषा में समझा दिया गया है यह रोग एक प्रकार का कैंसर है मेरा बच्चा जिग कैंसर से पीड़ित है, उसके इलाज और ठीक होने की संभावना के बारे में डॉक्टरों ने बताया है इस बिमारी के उपचार की अवधि लगभग

2 महीने/Year है

कीमोथेरेपी उपचार का मुख्य आधार है इसके अन्य दुष्प्रभाव (side effects) हो सकते हैं ये दुष्प्रभाव स्थायी (permanent) या अस्थायी (temporary) हो सकते हैं बालों का झड़ना, भूख ज्यादा या कम लगना मुंह में छाने, मूत्र में बदलाव होना, बिड़बिड़ापन, पेट दर्द, कब्ज, टांगों में दर्द आदि आमतौर पर अस्थायी (temporary) रूप से देखे जाते हैं कीमोथेरेपी के कारण अक्सर न्यूट्रोपीनिया (मफेद Cell की कमी) हो जाता है इसके कारण बुध्दा और संक्रमण (infection) होना आम बात है मुख्य रूप से तुरंत एंटीबायोटिक (antibiotic) शुरू करना आवश्यक है कई बार संक्रमण (infection) गंभीर और जानलेवा भी हो सकता है जरूरत पड़ने पर गंभीर समस्याओं के लिए इंटेंसिव केयर यूनिट (ICU) में जाने की आवश्यकता पड़ सकती है ICU में बेंड की उपलब्धि मांग और आपूर्ति पर निर्भर होती है कीमोथेरेपी कारण प्लेटलेट (platelets) की कमी हो जाती है जिसके कारण विभिन्न प्रकार की bleeding (खून बहना) हो सकती है कभी-कभी कीमोथेरेपी के कारण एलर्जिक रिएक्शन हो सकते हैं, जो गंभीर रूप ले सकते हैं कदाचित (rarely), दवाईयों का अंगूर दिमाग पर हो सकता है, जैसे दौर पड़ना, नमों में नुकसान, मस्तिष्क विकृति और बुद्धि में कमी, आदि कई दवाईयों के कारण हृदय (heart) को क्षति पहुंच सकती है जिगर या आंतदियों को नुकसान, मधुमेह, pancreas को क्षति, हड्डियों में कमजोरी, मैटाबॉलिक बदलाव, आदि दुष्प्रभाव हो सकते हैं ये दुष्प्रभाव इलाज के दौरान या समाप्ति के बाद देखे जा सकते हैं इलाज में कई प्रकार की प्रक्रियाएं आवश्यक होती हैं, जैसेकि बोनमैरी जांच और इन्टरफिकल (IT) कीमोथेरेपी, जिसके लिए एनसथेसिया (बेहोशी) जरूरी होता है एनसथेसिया (बेहोशी) आमतौर पर सुरक्षित होता है यदाकदा कई प्रकार की समस्याएं हो सकती हैं उदाहरण के तौर पर - सांस का रुकना, दिल का दौरा, निमोनिया, आदि इलाज के दौरान खून, प्लेटलेट (platelets) या प्लाजमा plasma (खून का मफेद पानी) चढ़ाने की आवश्यकता पड़ सकती है कदाचित (rarely) इसके कारण एलर्जिक रिएक्शन हो सकते हैं और त्रिमेटाइड्स वी, सी, या HIV जैसे संक्रामक रोग भी हो सकते हैं कीमोथेरेपी के कारण प्रजनन (fertility) शक्ति पर दुष्प्रभाव हो सकता है इलाज के दौरान या उसके पश्चात, कैंसर के वापिस आने का जोखिम है

हम आपको आगामी उपचार के लिए शुभकामना देते हैं

पिता के हस्ताक्षर मुकेश कुमार

माता के हस्ताक्षर

उषा कुमारी

पिता के हस्ताक्षर

Kanchi kaur

17/12/22

→ well defined, demarcated  
shell (multiple)

→ Vascular bone appose

→ soft bone appose

Exp: multiple, demarcated  
shell (multiple)

CK-ray frontal view

→ Vascular life long folds

→ life 10% appose

→ life 10 angle appose

→ Cardiac silhouette

→ Bony cup appose

Exp none

Know UL & Rinal

→ Vascular bone appose  
(R)

→ soft bone (R)

→ joint space (R)

Exp none

Know UL & joint

→ Vascular bone appose  
(R)

→ soft bone (R)

→ joint space (R)

Exp: none



Ref. No.: .....

Date: .....

26/07/2023

श्रीवा में,

संस्थापक महोदया  
किल्कारी ट्रस्ट  
नई दिल्ली,  
महोदया,

मैं मुकेश कुमार पिता आर्या का पिता आपसे आवेदन  
करता हूँ की हमारे बच्चे के इलाज में सहायता करें।  
हमारे बच्चे को ब्लड कैंसर हो रहा है। दिन  
प्रतिदिन इसका पैरानी बढ़ते जा रहा है। कैंसर  
बहुत गंभीर किमारी है। इसका इलाज जल्दी शरण  
बल चिकित्सालय से हो रहा है। मैं बहुत दुर से  
आता हूँ अपने बच्चे के इलाज कोलिया

हमारा परिवार जिवन भर आपका  
आभारी रहेगा। कृपया करके हमारे बच्चे पर  
अपना आशीर्वाद बनाये

प्राथी-

मुकेश कुमार

