Clinical Cases

A 33-YEAR-OLD – WOMAN WITH A DIAGNOSIS OF CLASSICAL HODGKIN LYMPHOMA

Previous medical history:

- *A 33-year-old woman was admitted to our hospital in September 2023*
- *Symptoms of chills with a fever > 38°c, fatigue, drenching night sweats, chest pain, cough, and shortness of breath. This symptoms had begun a week before she was admitted to our hospital.*
- *A CT examination of the chest was performed on an outpatient basis; the presumed diagnosis was a lung abscess.*

- ***05.09.2024 The patient had a preterm labor with twins; one fetus had dead before birth and the second one died a few hours after delivery.***
- ***Anamnesis: No comorbidities; she had been smoking but ceased during pregnancy.***

Laboratory examination:

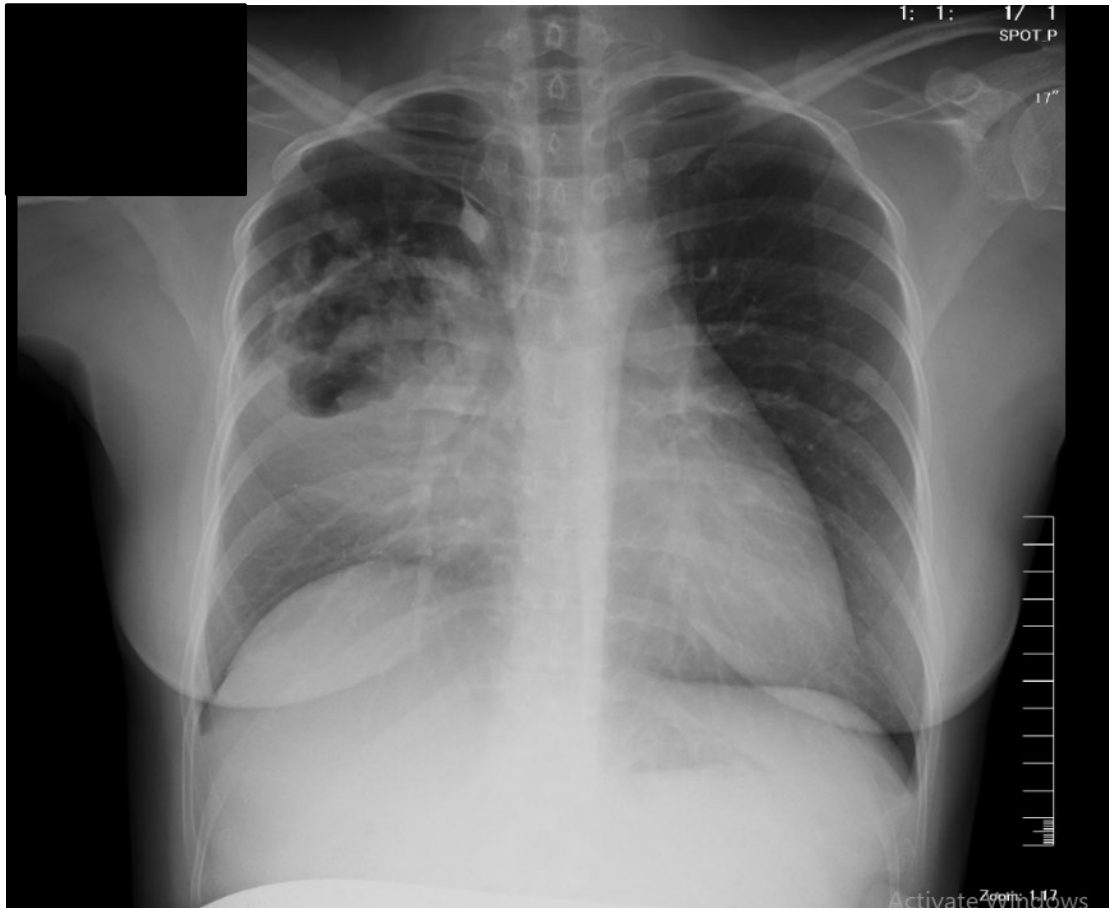
- *CBC:*
  - *RBC 4.24X10^{12}/l, HGB 9.9g/l, MCV 79.1fl, PLT 496x10^{9}/l, WBC 12.5x10^{9}/l*
  - *Neut 88%, Lymph 3.9%, Eo 0.6%, Bas 0.2%, Mon 7.3%, ESR 80mm/h, Ret 2%*
- *Blood film showed microcytosis and an increased number of platelets but no other abnormalities.*

- *CRP 197.15 mg/l, Procalcitonin 0.5 ng/ml,*
- *LDH 660 u/l, Tot Protein 54 g/l, Albumin 30 g/ l*
- *Serum Creatinine, Urea, Uric Acid, ALT, AST, GGT, ALP, Tot Bill, Potassium, Calcium, and Phosphate were in the normal range.*
- *Fe 5 µmol/l, Ferritin: 620 ng/ml, B12-1200 pg/ml*
- *Folate 2.5mg/l*
- *Coagulation: INR 1.12, APTT 44.2sec, Fibrinogen 8.85g/l*

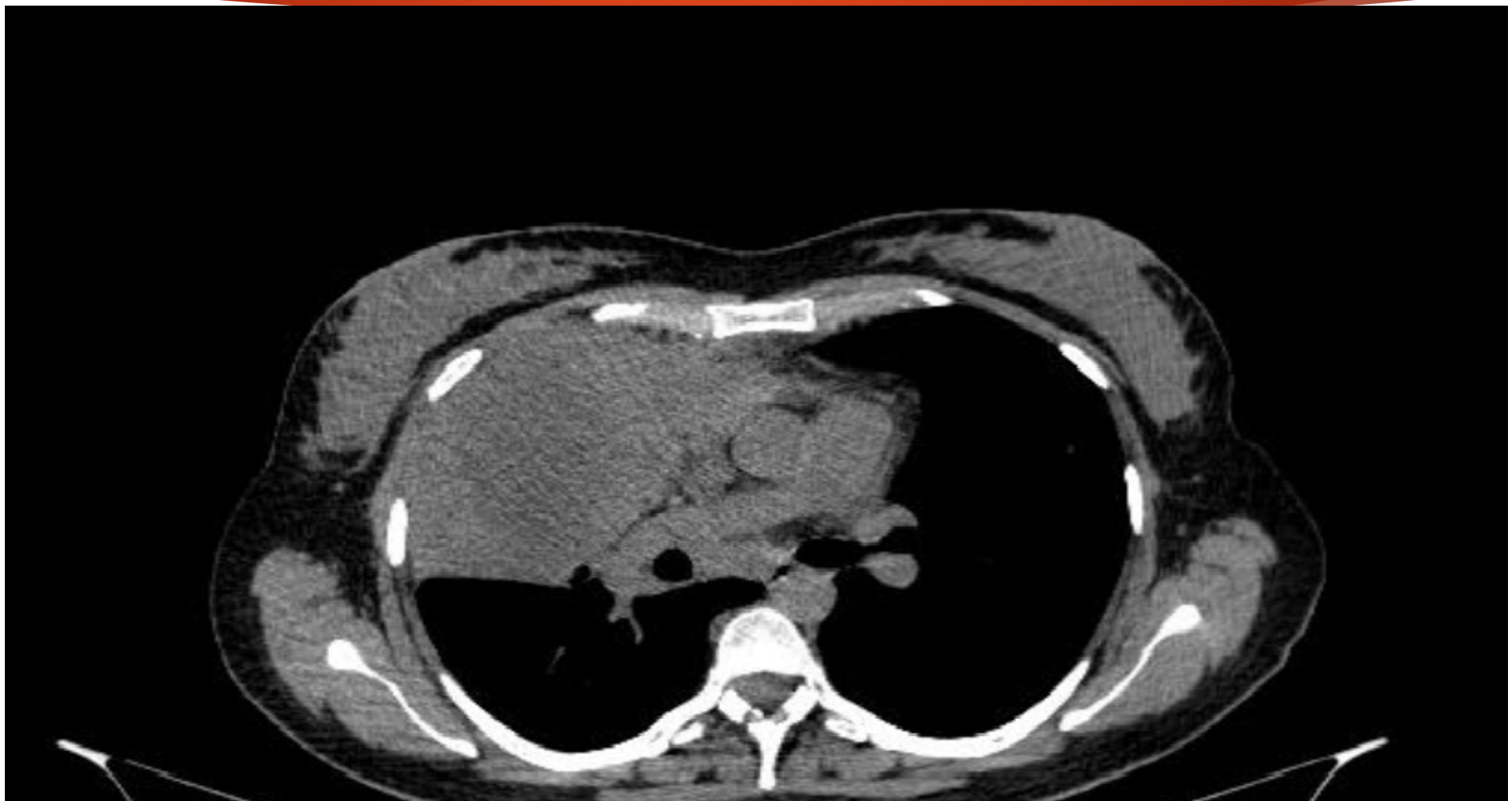
- **Blood culture was negative.**
- ***Anti-HCV, Anti-HIV, Anti-HBsAg: Negative***

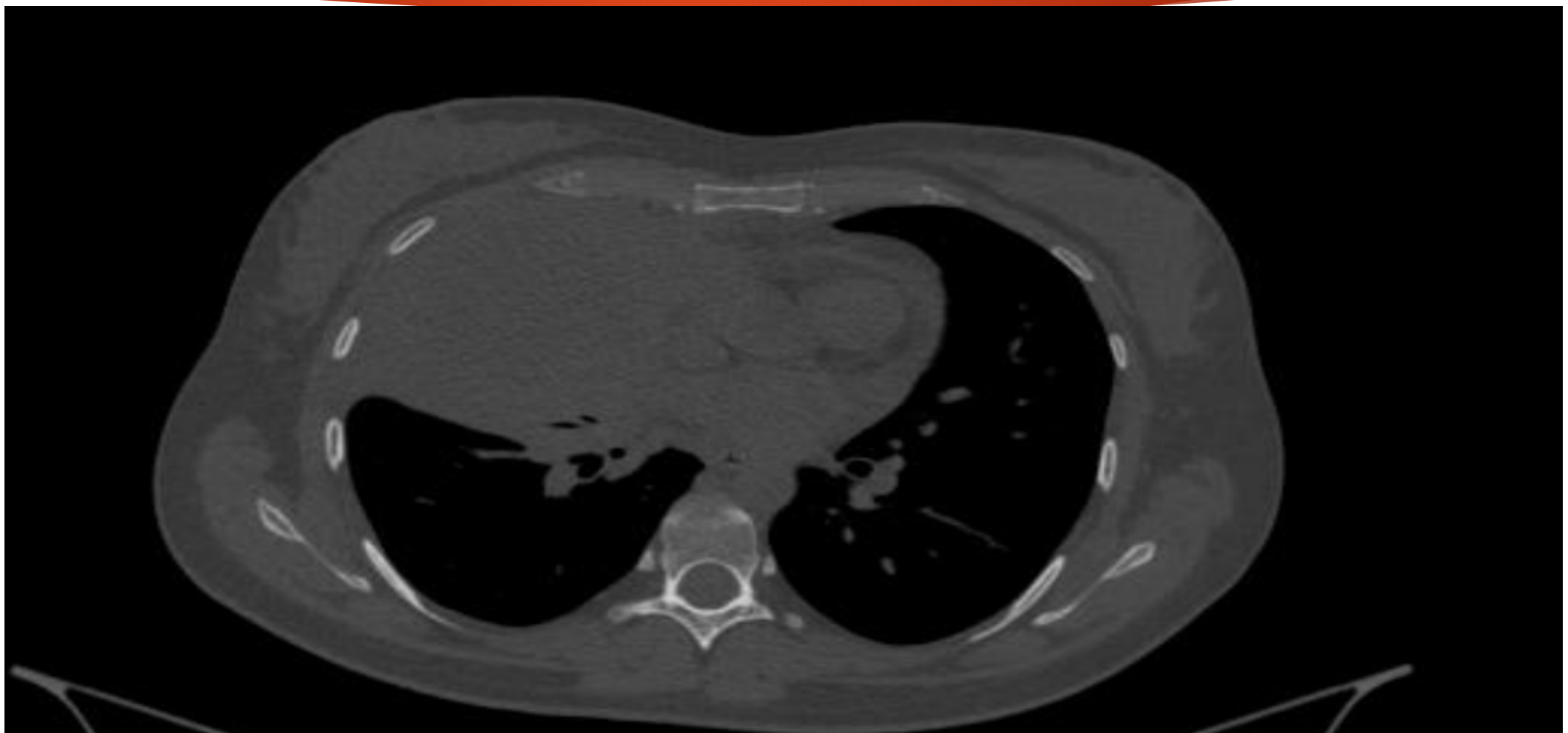
X-RAY examination

- ***A chest X-ray revealed consolidation of the middle and partial lower lobes of the lung.***


SPOT P
17"

- ***On a CT scan of the chest in the right upper and middle lobe of the lung, there was a 9.5x11.0cm tumor mass with necrosis and lymphadenopathy in the mediastinum.***



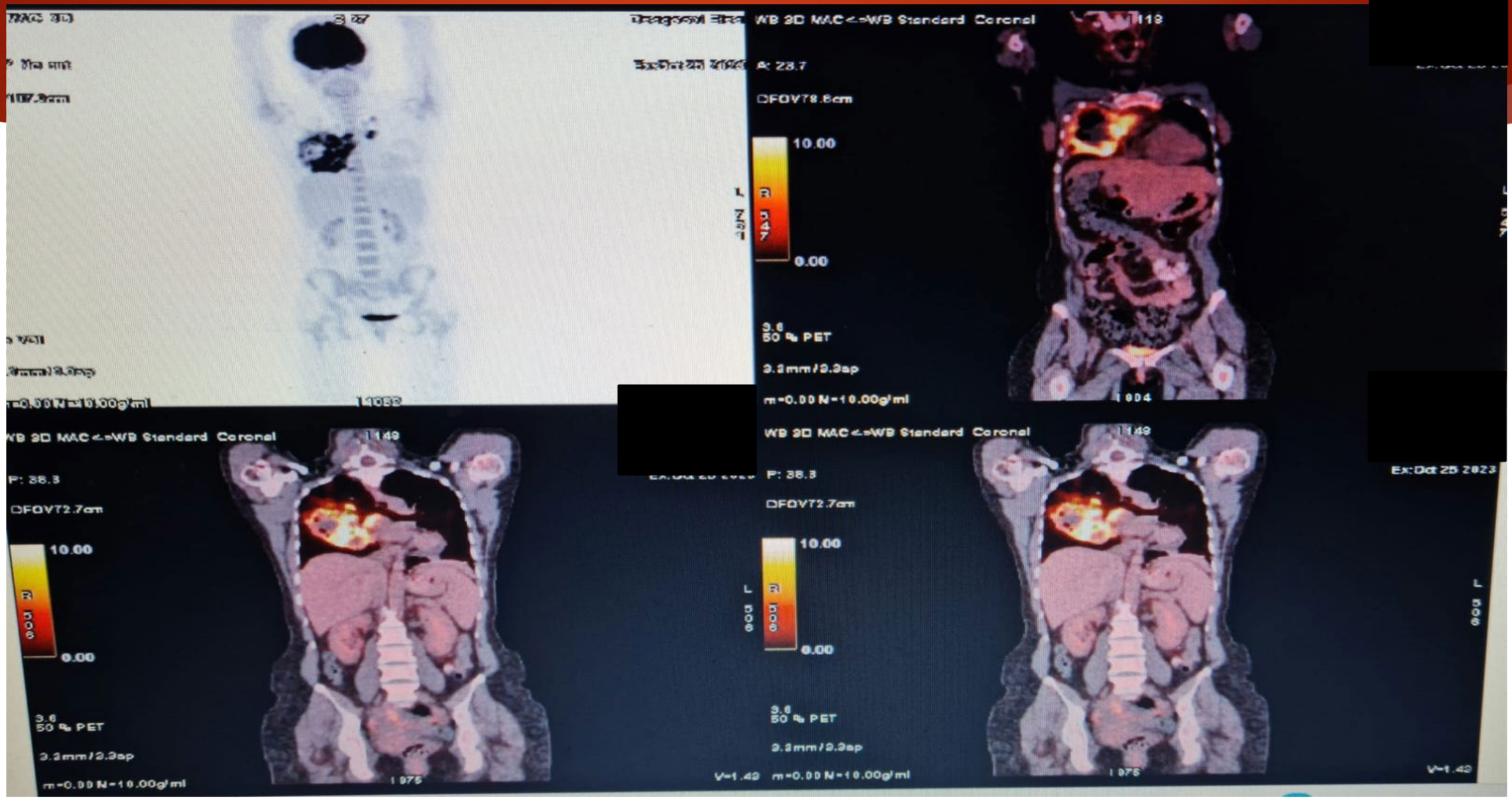


- ***Flexible bronchoscopy was done, and tuberculosis, aspergillosis, and bacterial pneumonia were excluded.***
- ***Abdominal ultrasound revealed splenomegaly***

- *12.10.23: a biopsy of the right lung was done. Histological and immuno-histochemical examination showed Reed-Stenberg and Hodgkin cells with positive staining for CD30, CD15 MUM1. Staining for CD3 CD20, and CD45 were negative. Kit-30%*

- *Diagnosis - Classical Hodgkin Lymphoma*

- ***Whole body PET-CT was performed:***
- ***Lung: in the right upper and middle lobe of the lung where the tumor mass with necrosis had been found with increased FDG uptake SUV max 15.***
- ***Also: left supraclavicular, paratracheal, and subcarinal lymphadenopathy was detected SUV max 12.***


WB 3D MAC<->WB Standard Coronal
10.00
0.00
3.6
50 % PET
3.2mm/2.3sp
m=0.00 N=10.00g/ml
WB 3D MAC<->WB Standard Coronal
10.00
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50 % PET
3.2mm/2.3sp
m=0.00 N=10.00g/ml
WB 3D MAC<->WB Standard Coronal
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50 % PET
3.2mm/2.3sp
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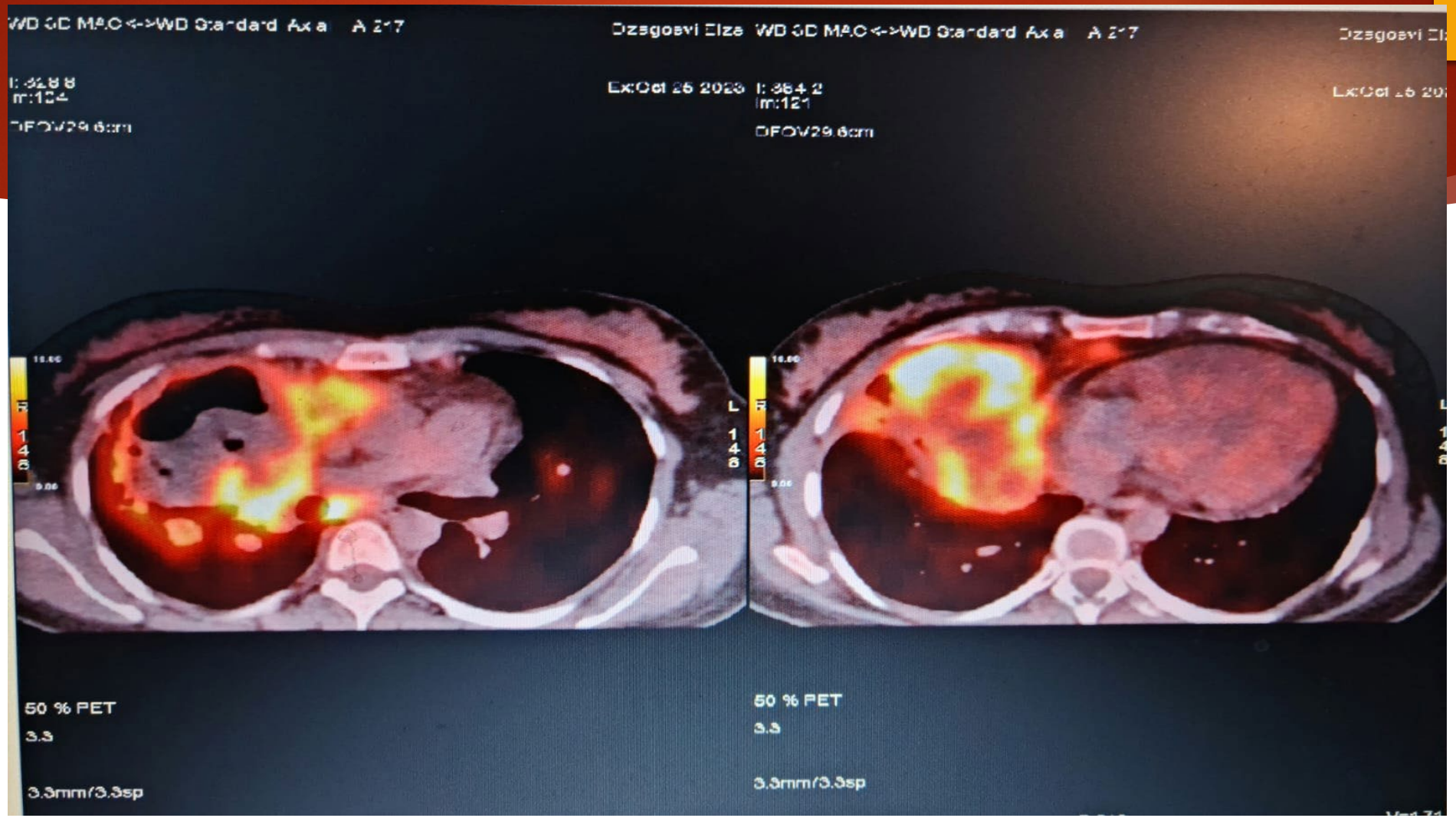
Ex:Oct 25 2023


Dzsgosvi Elza
50 % PET
3.3
3.3mm/3.3sp
50 % PET
3.3
3.3mm/3.3sp

Therapy

- *We started escalated BEACOPD (Doxorubicin, etoposide, Dacarbazine, cyclophosphamide, prednisolone, vincirstine, blemycin), the first cycle was given, but within 30 minutes of etoposide commencement, she experienced a hypersensitive reaction consisting of erythematous rash, tachycardia, and hypoxia.*
- *Etoposide was discontinued immediately, and she was successfully managed with i/v hydrocortisone, promethazine and i/v fluid.*

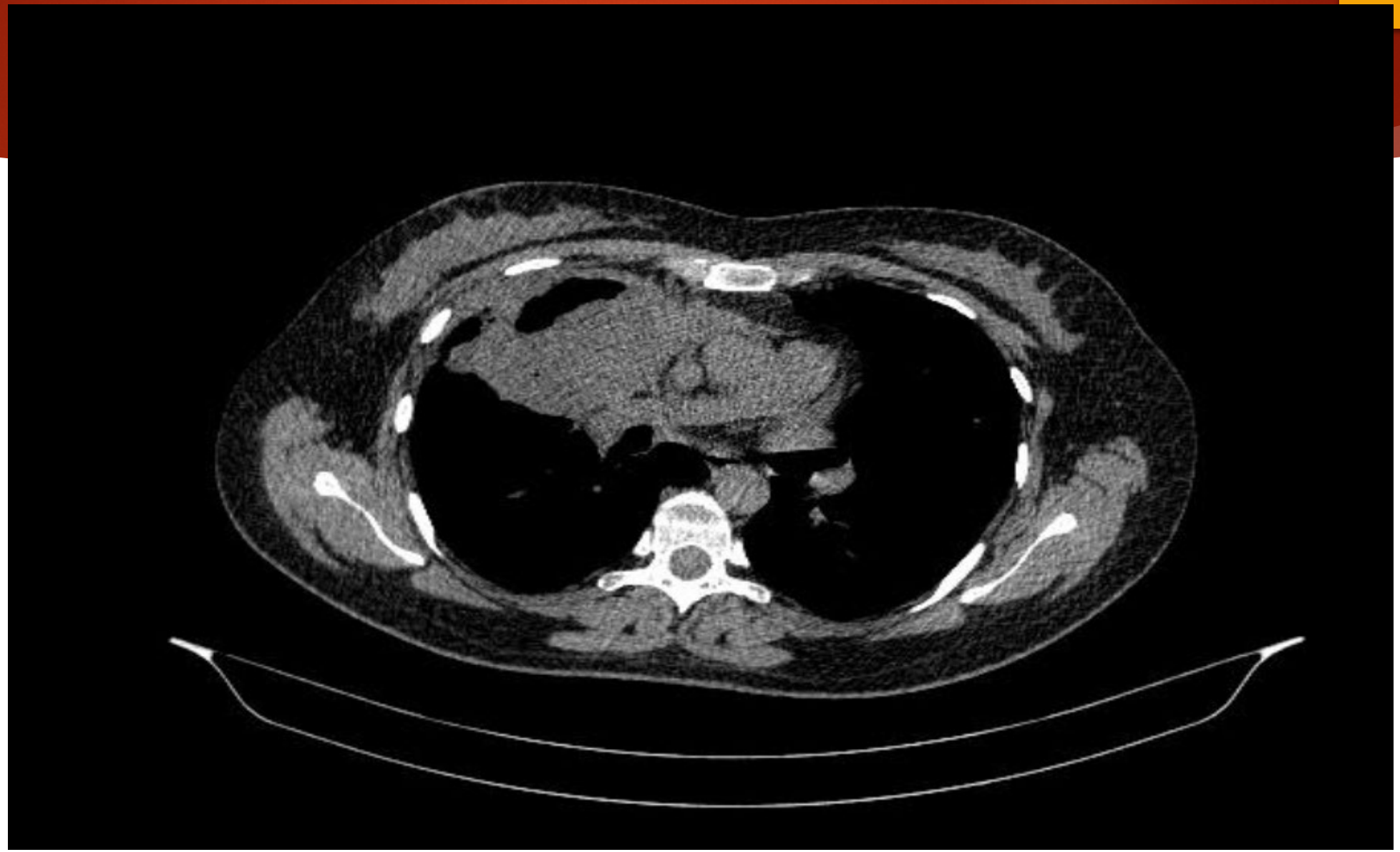
BACOPD:

- ***The patient was reviewed by an allergy specialist, and methylprednisolone and antihistamines were prescribed three days before chemotherapy.***
- ***(methylprednisolone 30 mg, famotidine 40 mg, fexofenadine 180 mg, and levocetirizine dihydrochloride 5 mg/).***

- ***A second cycle was given with escalated BEACOPD in the ICU, but within one minute of etoposide commencement, she experienced the same symptoms, etoposide was ceased and chemotherapy regimen was changed to ABVD***

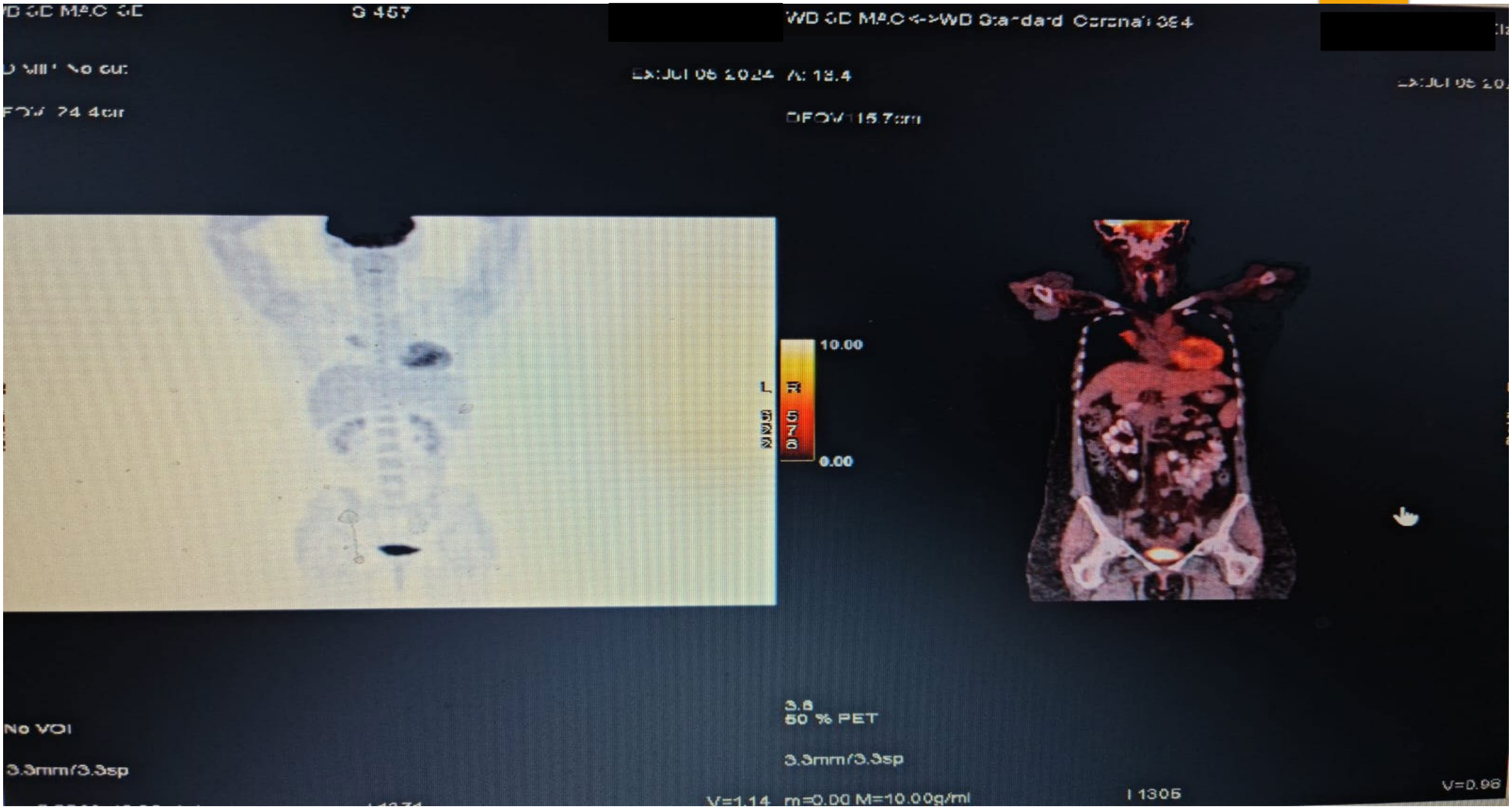
ABVD: doxorubicin, bleomycin, vinblastine, dacarbazine

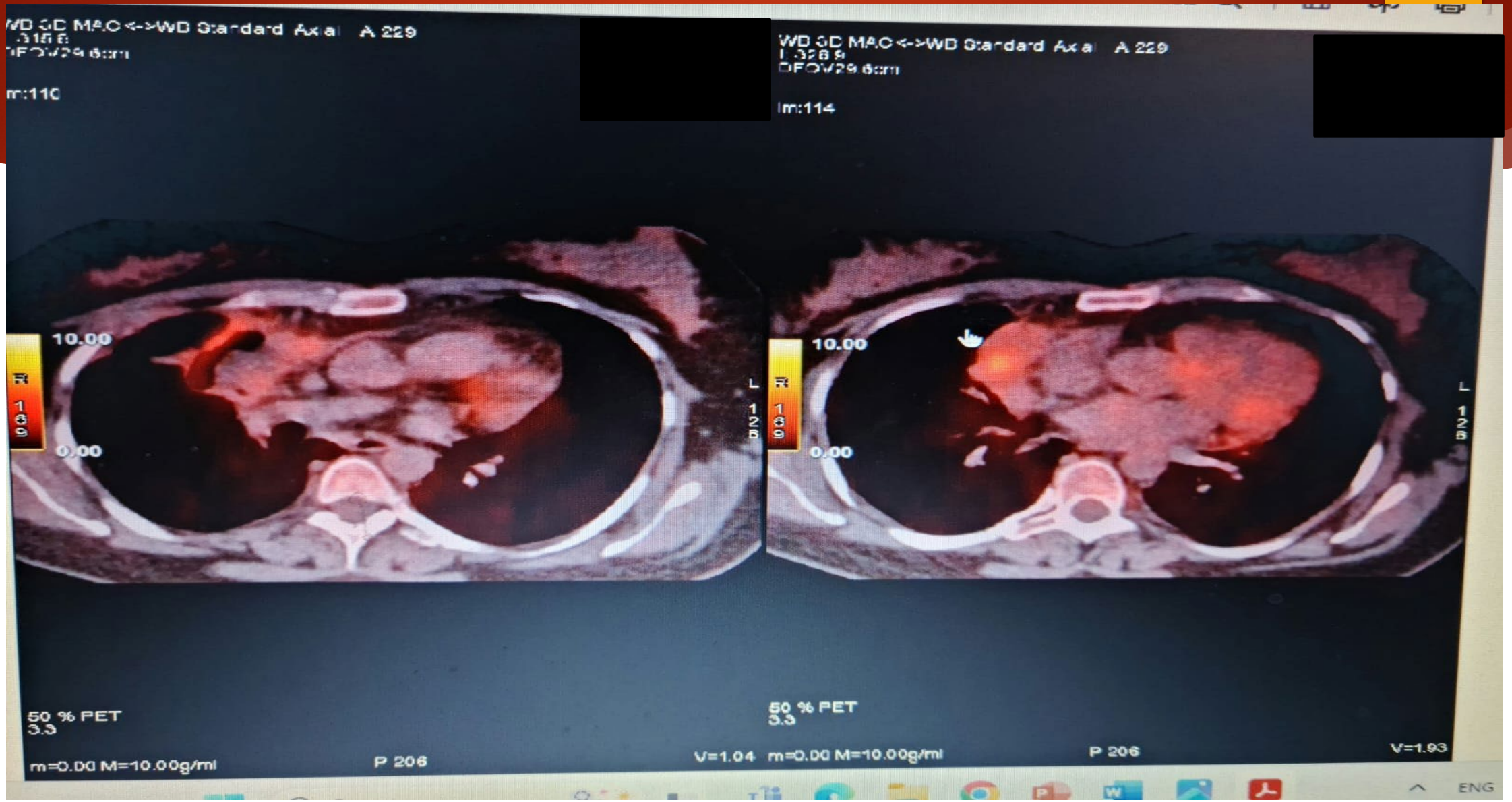
- ***After two cycles of escalated BEACOPD, a CT scan of the chest was performed. The tumor mass, which was in the upper and middle lobe of the right lung was reduced in size to 6.0x7.2 cm.***



- ***The patient got two cycles of ABVD, but during that period the patient had uncomplicated COVID-19 and clostridium infection which was treated with oral vancomycin for two weeks.***

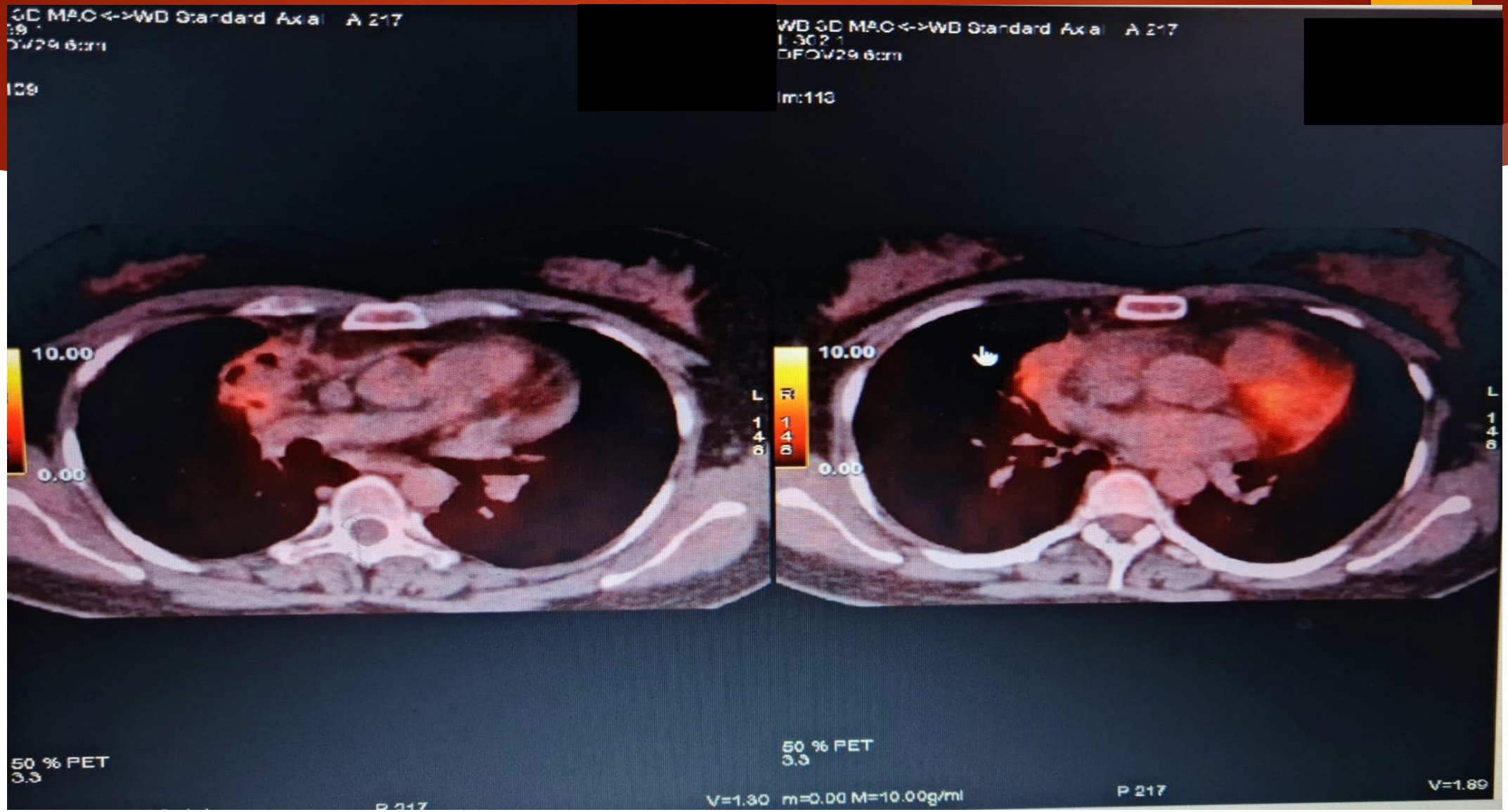
- *After two cycles of ABVD, whole-body PET-CT was done.*
- *The tumor mass was in the right upper and middle lobe of the lung and was reduced in size by 30x42mm FDG uptake SUV 4.0*


10.00
0.00
No VOI
3.3mm/3.3sp
3.8
50 % PET
3.3mm/3.3sp
V=1.14
m=0.00 M=10.00g/ml
I 1305
V=0.98


WD 3D MAC <->WD Standard Axial A 229
Im:110
10.00
0.00
50 % PET
3.3
m=0.00 M=10.00g/ml
P 206
WD 3D MAC <->WD Standard Axial A 229
Im:114
10.00
0.00
50 % PET
3.3
V=1.04 m=0.00 M=10.00g/ml
P 206
V=1.93
ENG

- ***The chemotherapy regimen was changed and patient received chemotherapy with two cycles of BV-Brentuximab and bendamustine.***
- ***Between cycles she had clostridium infection, the patient was treated with metronidazole 500 mg t.i.d and oral vancomycin for two weeks.***

- ***After systemic treatment re-staging with PET-CT was done, the size of the tumor mass was 25x37mm FDG uptake SUV 2.8.***


WD 3D MAC <->WD Standard Axial A 217
Im:113
10.00
0.00
L
R
146
50 % PET
3.3
V=1.30 m=0.00 M=10.00g/ml
P 217
V=1.89

- *After systemic treatment HDT/ASCR was performed, conditioning regime was BEAM.*

- *The patient had no complications and was discharged in good condition. After three months PET-CT is planned*

Discussion

- Was escalated BEACOPP regimen preferred firs line treatment?
- Was it right discission to infuse etoposide on Cycle 2 after the reaction we had on Cycle 1?
- Did patient need radiologic therapy instead of second line treatment followed by ASCT?