

# 40 year old woman with malignant melanoma

June is a 40-year-old woman who was diagnosed in the autumn of 2020 with a BRAF+ malignant melanoma on her upper arm with local lymph node metastasis. She was treated successfully with surgery and received adjuvant immunotherapy.

Two months later she was admitted to your hospital with pain in her shoulder and thoracic column. A junior doctor started her on low-dose opioids with little effect and consults you for advice

1. What could be the probable cause of her pain? Mets in bone
2. How do you advise the junior doctor on pain treatment and diagnostics?

CT T/A. Paracetamol. Long acting opioids. Steroid if there is a suspect of medullar involvement.

The next day there is a CT scan of the patient's thorax and upper humerus and it shows bone metastases in Th2 and Th3

The patient who has started long-acting morphine tablets has also received fast-acting morphine 10 times in the last 24 hours. She has pinpoint pupils and seems a bit agitated. The junior doctor has contacted the oncologist who is busy in the outpatient clinic and not able to see the patient until late in the afternoon

3. How do you advise the junior doctor today on:
  - a. -pain treatment Increase long acting morfin, Steroid, maby Secondary analgetica
  - b. -clinical examination and diagnostic work-up Signs of neuropathic pain and medullary involvement.
4. If examination makes you suspect a malignant medullary compression, what would you do?  
Acute MRI,
5. Are you sure the patient's metastases are from malignant melanoma? No, the treatment will be the same at this phase

In the next couple of days, the patient has had an MRI of the column and further CT scans of the abdomen and pelvis. This shows that the patient also has metastases in the liver and in a lumbar vertebra in addition to what you already knew. A liver lesion has been biopsied. The patient does not have a medullary compression, but you do not have pain control with an opioid infusion and pregabalin.

6. The junior doctor suggests starting the patient on steroids and referring to radiotherapy. Do you support that decision? Yes. and raise pregabalin, and Benzo probably. Would steroids provide pain relief?: yes might do

The oncologist wants to start double immunotherapy (ipilimumab-nivolumab) and stresses “no steroids”

7. Why? Steroids work against immunotherapy effect

The patient is treated with immunotherapy and also receives radiotherapy towards the thoracic column and the pain medication is tapered successfully over the next weeks. Then the patient is admitted again to hospital this time to the palliative ward. She has some upper abdominal pain, and she is agitated, restless and you suspect a delirium.

8. What could be the cause of the patients' symptoms? Suggest diagnostic work-up. Physical Examination of the patient. Blood work, Ct scan ( look for Colitis and thrombosis), hypophysitis, (. Infection with delirium.



Bloodwork shows liver enzymes and bilirubin 5 times normal, otherwise an almost normal hemogram, electrolytes, and kidney function

A new CT scan shows disease progression – but only some progression in the liver.  
Cerebral MRI seems normal.

You are waiting for her oncologist to come visit your ward.

9. Is there any other blood work you would consider at this point? Amylase if not taken, INR, Trombocytes.
10. What do you suspect and how would you treat the patient? Pancreatitis, Cholecystitis, hepatitis stent and antibiotic,

A month or so later the patient has increasing pain in her thoracic column, liver enzymes are approaching normal, but the patient has a lot of anxiety. She is sometimes agitated, has trouble sleeping. She constantly wants to get up and out of bed and is afraid to sleep. She begs the nurses and doctors to provide her with some hope of a longer life or a cure. She has small kids and repeatedly says she finds it impossible to comprehend her situation with a terminal disease.

The oncologist agrees to start treatment with a BRAF inhibitor. Her ECOG (or WHO performance status) is assessed to be 2-3

11. What does ECOG/WHO PS mean? Performance status 3, in the bed more than 50% of the time.
12. How can an ECOG status help the oncologist choose a treatment plan? The documentation for treatment is based on studies for patient with better performance status. ECOG 3 and Braf inhibitor is not a recommended situation.
13. What does ECOG or WHO say about life expectancy? Usually correlated to life expectancy
14. You have learned that ECOG 2+ probably is a contraindication for palliative chemotherapy. Does it apply to immunotherapy, BRAF inhibitors, and other targeted treatments? Yes it is a good advice still for the new treatments. But this can vary between different cancer types, ask an oncologist

The patient starts with BRAF and MEK inhibitor, but after a few weeks, she is in an agitated irreversible delirium and dies with palliative sedation in the palliative ward.







Harald is a 53 years old man who was diagnosed with cancer coli with liver, lung and bone metastases.

He now receives 2. line chemotherapy.

He is referred to the «APCU\*-integrated pathway» as an out-patient at the APCU at the Cancer Clinic

- Why should patients be referred to an «integrated pathway»? Complex palliative problems, one major problem or many different symptoms.
- Which patients should be referred?
- How should these patients be followed?

After some weeks the patients is hospitalized at your APCU because of pain in the pelvic.

- What do you do?

\*APCU-acute palliative care unit

You are at duty some days after the patients is hospitalized.

The nurse calls you and tell that Harald has fever, temperature 39 degrees

- What is your considerations?

You ask the nurse; when did Harald receive chemo? She says about 10 days ago.

- What will you do?
- Is this an emergency?

Haralds father see you after some days. He talks about his son but after a while he tells you that he has an heart failure and COPD. He has home care 4 times a day. You see that he is fragile. He ask you, «may I be referred to an integrated pathway as well?»

- How should we deal with integrated pathways for non-malignant diseases?