A Case Report of Unrespectable Liver Metastases from Cancer Rectosigmoid Colon with Survival Greater Than 6 Years and Clinical Benefit after Multidisciplinary Treatment

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Abstract:-

> Introduction

Colorectal cancer represents 1,271 new cases per year in Morocco, However, over the last 30 years we have witnessed a significant increase in the overall survival of metastatic patients due to the arrival of new molecules.

> Case Presentation

We report the case of a 51 years old african female patient diagnosed for a moderately differentiated adenocarcinoma of the rectosigmoid junction MSS, wild RAS/BRAF, treated with colorectal protection and lymph node dissection, followed by 6 cycles of fulfolcisplatin as an adjuvant. the follow up revealed the appearance of hepatic masses. The liver biopsy was performed showing a secondary localization of an adenocarcinoma of digestive origin.

The patient received four lines of the chemotherapy, anti-EGFR antibodies and immunotherapy following the guidelines. However, since no KRAS NRAS BRAF mutation was detected at the DNA level circulating tumor, no rechallenging of the anti- EGFR was possible.

The hepatic progression continued with appearance of pulmonary lesions, the decision was made for a palliative care.

> Conclusion

Our case highlights that due to the emergence of new effective molecules currently available, associated with a dedicated onco-surgical approach, more patients will be able to benefit from prolonged survival that did not seem achievable at the time of diagnosis.

Keywords:- Biomarkers, Metastatic Colorectal Cancer, SystemicTreatment, Overall Survival.

I. INTRODUCTION

Colorectal cancer represents 1,271 new cases per year in Morocco [1], 43,000 new cases in France, 30% of which are metastatic at diagnosis. However, over the last 30 years we have witnessed a significant increase in the overall survival of metastatic patients (median 6 months in the 80s, more than 3 years currently) due to the arrival of new molecules which have been able to change the natural history of this pathology.

II. CASE PRESENTATION

We report the case of a 51 years old african female patient diagnosed in 2016 in Ivory Coast for a moderately differentiated adenocarcinoma of the rectosigmoid junction MSS, wild RAS/BRAF, treated with colorectal protection and lymph node dissection, pT3 N1b M0, followed by 6 cycles of fulfol-cisplatin as an adjuvant. In 2021 the follow up revealed the appearance of hepatic masses in the segments II, III, IV (Fig.1), associated with bilateral ureterohydronephrosis.

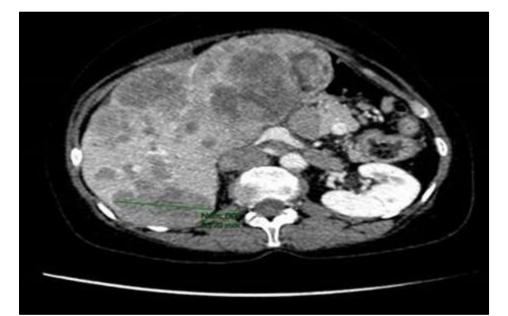


Fig 1 : Abdominal CT Scan Showing the Liver Masses in the Segments II, III, IV. The Biggest One Mesures 65mm in the Largest Diameter (in Green)

The patient received 4 cycles of chemotherapy type Carboplatin/Paclitaxel. However the clinical progression of the disease motivated the patient to travel to France for continued medical care where a liver biopsy was performed showing a secondary localization of an adenocarcinoma of digestive origin.

The patient received in first line 10 cycles of folfox and cetuximab for 4 months then in second line 10 cycles of folfiri associated to bevacizumab, the last dose was administrated on july 2023. Due to the countinous hepatic progression, we decided to put her under a third line with 3 cycles of trifluridine/tipiracil and bevacizumab, then she benefited from 3 folfox and panitumumb courses in fourth therapeutic line . No KRAS NRAS BRAF mutation was detected at the DNA level circulating tumor so no rechallenging of the anti-EGFR was possible.

In November 2023 we noted a clear hepatic progression with appearance of pulmonary lesions, the decision was made for a palliative care through exclusive comfort care, the patient remained hospitalized in conventional oncologyuntil her death in december 2023.

III. DISCUSSION

The treatment of the metastatic colorectal cancer (mCRC) has significantly improved due to the discovery and comprehension of several molecular and anatomical indicators, the molecular study is required to identify the most effective treatment , hence ,it is essential to have the MMR status and somatic genetics (DNA PCR: KRAS/NRAS status with particular attention to the KRAS G12C mutation, BRAF status) at diagnosis.

In wild-type RAS/BRAF with unresectable metastatic colorectal cancer , the STRATEGIC-1 trial compared the FIRE 3 regimen (FOLFIRI + Cetuximab until progression/toxicity in 1st line followed by FOLFOX + Bevacizumab continuously) to the TML regimen (OPTIMOX + Bevacizumab followed by FOLFIRI + Bevacizumab continuously, reserving the anti-EGFR antibody for the 3rd line) [2]. The duration of diseasecontrol (primary endpoint) was not significantly different between the 2 arms, nor was overall survival and time to deterioration in quality of life. The PARADIGM, CAIRO-5, TRIPLETE and STRATEGIC-1 trials confirm dual chemotherapy + anti-EGFR antibody as the standard first-line treatment for MSS/MSI low, RAS/BRAF wild-type left colons [3].

From the second line, the choice of protocol depends on the treatment received in first line, the molecular biology (MSI, RAS, BRAF, HER2 status), the metastatic sites and of course the patient. In second line, it is recommended to continue anti-angiogenic blockade if Bevacizumab was used in first line (TML regimen or switch to aflibercept) [4]. If an anti-EGFR antibody was prescribed in 1st line, then the treatment will be modified in 2nd line in favor of anti-angiogenics (dual chemotherapy + Bevacizumab or FOLFIRI + Aflibercept), which allows to keep the anti-EGFR antibody for rechallenge or reintroduction later) [5,6] (if possible guided by the search for RAS mutation in circulating tumor DNA [7]).

Two molecules, evaluated by randomized phase III against placebo, already had an marketing authorization in France as 3rd line of treatment: Regorafenib and Trifluridine-Tipiracil. A new standard emerged in 3rd line in 2023 following the results of the phase III SUNLIGHT study which compared the Trifluridine-Tipiracil standard to the Trifluridine-Tipiracil + Bevacizumab combination [8].

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The study is positive in overall survival and progression- free survival, regardless of RAS status, preexposure to anti-angiogenic treatment and laterality of the primary tumor.

IV. CONCLUSION

Our case highlights that due to the emergence of new effective molecules currently available, associated with a dedicated onco-surgical approach, more patients will be able to benefit from prolonged survival that did not seem achievable at the time of diagnosis.

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