Adjuvant and palliative treatment of carcinoma of the sigmoid colon

Objectives:

1. Course of chemotherapy, depending on the progress of the disease
2. Supportive care
3. Treatment options after failure of therapy

▶ Evaluation

This case report presents the full course of the disease. There are discussed chemotherapy, supportive care and possible alternatives for treatment. Similarly, the subjective (emotional) and objective (financial) limitations in palliative care are presented. While both the adjuvant and palliative chemotherapy was accompanied by a few problems and was well tolerated by patient, the final phase for all involved was much more complicated.

▶ Literature

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SmPC: Vectibix®, Eloxatin®, Xeloda®

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Adjuvant and palliative treatment of carcinoma of the sigmoid colon

FB, born 1960, male, 184 cm, 98 kg, BSA 2.00 m² (Auto-Reduction) 07/1999

Subjective data	Long-lasting abdominal pain with cramps, constipation	
Objective data	Colon cancer diagnosis pT3pN1M0G2 (UICC III) Surgical resection of the tumor with preservation of the anus	
Prescriptions	**Prescriptions** 5-FU/FA 2500 mg/m² 5-FU 24h + folinic acid 500 mg/m² d 1, 8, 15, 22, 29, 36 Repeat d 49, 3 cycles Dexamethasone, metoclopramide Also from the sixth day: 5-HT3 antagonist	**Treatment goals** adjuvant chemotherapy in order to prevent relapse antiemetic therapy
Analysis and Plan	**Analysis / assessment** In UICC stage III, adjuvant chemotherapy after curative surgery is essential. The 5-year survival rate is ‹60%. The combination of 5-FU / FA is one of the low emetogenic regimens. The initial steroid and MCP dose would be sufficient. After the fifth treatment day patient had insufficient response to the antiemetics. Overall, the therapy is well tolerated.	**Plan** Standard therapy with 5-FU / FA Addition of a 5-HT3 antagonist
Control parameters	Before each therapy: current platelet and white blood cell count, CT	

Adjuvant and palliative treatment of carcinoma of the sigmoid colon

FB, born 1960, male, 184 cm, 98 kg, BSA 2.00 m² (Auto-Reduction) 11/2004

Subjective data	Breathing difficulties, weakness, performance worsening	
Objective data	Diagnosis lung metastases Partial lung resection, EGF-receptor positive metastases	
Prescriptions	**Prescriptions** AIO + irinotecan Irinotecan 80 mg/m² Folinic acid 500 mg /m² 5-FU 2000 mg m² over 24 hours Weekly As from March 2005 also bevacizumab 5 mg /kg, every 14 days 30 min. before chemotherapy: 5-HT 3 antagonist, dexamethasone, MCP Loperamide 4mg, then 2 mg every 2 hours until 12 hours after the last liquid stool (maximum 48h) Gelaspon® sponge in the nose	**Treatment goals** Palliative chemotherapy with the goal of remission Increasing the chances of remission after approval of Avastin® Antiemetic Therapy Diarrhea treatment Nosebleed treatment
Analysis and Plan	**Analysis / assessment** Whether a R0 resection was carried out is not known. The therapy was initiated on the request of the patient in January 2005. For the combination of FOLFIRI with Avastin® in studies a significant survival advantage is determined,. The nose bleed is a typical adverse effect of bevacizumab. The therapy was well tolerated, with few moderate adverse effects from the patient. In July 2005, a complete remission was achieved.	**Plan** Use of the combination of 5-FU-containing regimens with monoclonal antibody in metastatic colorectal Because of minor mucosal bleeding no therapy change is needed.
Control parameters	Before each therapy: current platelet and white blood cell count, CT	
Advice	• Diarrhea: Recommendation of Sidroga® - tea against diarrhea (dried blueberries) • Nose bleeding: observation of bleeding is important and if necessary consult with the doctor	

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FB, born 1960, male, 184 cm, 98 kg, BSA 2.00 m² (Auto-Reduction) 12/2005

Subjective data	Weakness, shortness of breath, discomfort in the upper abdomen, flatulence	
Objective data	Progression of lung metastases Liver metastases	
Prescriptions	**Prescriptions**	**Treatment goals**
	a) AIO + oxaliplatin + cetuximab (06/01 to 06/03) d1, 8, 15, 22, 29, 36 Repeat d 49	To achieve palliative immunochemotherapy with the aim of a further remission
	antiemetic premedication: See above	
	Ibuprofen 600 mg as needed	Treatment of back pain (possibly due to oxaliplatin)
	Metronidazole 1% cream in Excipial® Erythromycin 1% in Excipial® Cream	Acne treatment
	Mucositis-mouthwash Panthenol, 5% 50ml Xylocaine® Viscous 2%-50ml Maaloxan® Suspension 50ml (Prednisolut® 100mg Amp) He should use alternately a cortisone-containing and a cortisone-free variant.	Treatment of mucositis
	b) AIO + irinotecan + cetuximab (06/04 to 06/12) Cetuximab 400 mg / m² (starting dose) then 250 mg /m² Irinotecan 80 mg/m² Folinic acid 500 mg /m² 5-FU 2000 mg/m² over 24 hours d1, 8.15, 22, 29, 36 Repeat d 49	Replacement of oxaliplatin by irinotecan after allergic reaction at the 10th oxalipatin administration
	Loperamide as before	
Analysis and Plan	**Analysis / assessment**	**Plan**
	Restaging in March shows a partial remission. Since the presence of EGF receptor-positive metastases, such result was hoped for.	Continued therapy

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	Acneiform lesions occur in about 80% of patients treated with cetuximab. They are usually fully reversible.	As long as not exceeding the grade 2 skin reactions, treatment is continued.
	At the 10th administration of oxaliplatin, the patient responded during infusion with respiratory distress and massive skin redness. The administration of cortisone, an antihistaminic and oxygen tempered the reaction immediately. An on site present intensivist was consulted. Conclusion: Allergic reaction to oxaliplatin.	Change of oxaliplatin by irinotecan, as it was previously well tolerated.
	In December 2006 a complete regression of lung metastases and a partial regression of liver metastasis was proven.	Rest period after 26 cycles of chemotherapy.
	The long treatment carried out by the patient was well tolerated and was desired. The advice on the prevention and alleviation of adverse events was difficult, however, by patient accepted as belonging to the therapy.	
Control parameters	Before each therapy: current platelet and white blood cell count, CT	
Advice	• Caring for the skin (Excipial® cream) and cracked Feet (Urgo® Direct skin cracks Filmogel) • Directions for use of the painkillers • keeping a pain-diary • Mucositis solution was not being accepted by the patient well, although after 3 days a significant improvement was noticeable.	

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FB, born 1960, male, 184 cm, 98 kg, BSA 2.00 m² (Auto-Reduction) 1/2007

Objective data	Progression of lung metastases and liver metastases Abdominal lymph node metastases	
Prescriptions	**Prescriptions** AIO + irinotecan + cetuximab (01/07 to 06/07) (see above) Pre-and concomitant medication such as previous Palladon® 24mg ß2-agonists for inhalation	**Treatment goals** Palliative immunochemotherapy, symptom control, explicit patient request Pain reduction with increasing pain intensity to relieve of dyspnea
Analysis and Plan	**Analysis / assessment** The control parameters showed a progression of the disease during therapy. In addition, a pneumonia came in July 2007, which resulted in the patient coughing up a 3.0 x1,0x1,0 cm metastasis from the lung. The pain treatment was not sufficient.	**Plan** Discontinuation Recommendation of a pain-pump or a transdermal patch
Control parameters	Before each therapy: current platelet count and white blood cell count Tumor markers, tissue histology of the expectoration, CT / PET	
Advice	Liver tea by Maria Treben (club moss, nettle, calamus) • calamus root to chew On the request of the patient, the tea was prepared several times. It led to a significant improvement in subjective symptoms, and thus also to a short-term increased quality of life. • Despite the consulting, the patient was not open regarding a change in pain therapy. Transdermal patch or pain-pump were rejected. He wanted to determine by himself when, how many and which tablets he takes.	

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FB, born 1960, male, 184 cm, 98 kg, BSA 2.00 m² (Auto-Reduction) 11/2007

Objective data	Progression of lung and liver metastases abdominal lymph node metastases	
Prescriptions	**Prescriptions** Mitomycin + Capecitabine Mitomycin 15 mg/m2 q36 + capecitabine 2x1250 mg/m2/d d1-14 q21 Antiemetic therapy as before Platelet concentrate Lactulose enemas Heparin Insulin Lormetazepam Irradiation of the right hilum (8 courses, 3 times a week 5 Gy, Total dose 40Gy)	**Treatment goals** third line therapy, patients‘ request Correct the massive thrombocytopenia Treatment of constipation Treatment of thrombosis occurred Massive hyperglycemia 500 mg / dL = 28 mmol / l Treatment of anxiety
Analysis and Plan	**Analysis / assessment** Because of treatment failure and the expressed desire of the patient to conduct further chemotherapy, alternatives had to be found. The cumulative dose of mitomycin is 50 mg /m². This allowed only 3 cycles of drug to be administered.	**Plan** Treatment with panitumumab (Vectibix®), a complete human monoclonal antibody, was at that time in Germany not approved yet • not paid by health insurance of the patient Re-treatment with oxaliplatin after the occurrence of an allergic reaction would have been conceivable in principle (Oncologische Pharmazie Nr.3/2007) but was by the physician not be taken into consideration. Radioatio Admission to palliative care unit
Advice	In the final status of the disease any consultation was impossible. It was only out to give the patient the feeling that pain and discomfort can be alleviated. For everyone involved it was necessary to accept the autonomy of the patient. The patient died in February 2008 at the Palliative Care Unit at the Central Hospital Bad Berka.	