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# Steven Johnson Syndrome Induced by Pembrolizumab and Capecitabine: A Case of a 71-Year-Old Woman with Esophageal Metastatic Squamous Carcinoma Treated with Double Oral Chemotherapy

**Iovino Miriam Dafne[1]*, Rufolo Paola[1], Iovino Giovanni Mattia[2], Cavallaro Giulia[2], Giaccoli Marco[3], Liccardi Filomena[4], Ronga Ilaria[5] and Bova Maria[5]**

[1]Department of Clinical Medicine and Surgery, University of Naples, "Federico II", Italy

[2]Faculty of Medicine, University of Naples, "L. Vanvitelli", Italy

[3]Faculty of Medicine, University of Salerno

[4]Department of Emergency and Critic Area, A.O.R.N. "A. Cardarelli," Naples, Italy

[5]Department of Medicine and Medical Specialties, A.O.R.N. "A. Cardarelli", Naples, Italy

***Corresponding author**
Iovino Miriam Dafne, Department of Clinical Medicine and Surgery, University of Naples, "Federico II", Naples, Italy.

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## Background

Steven-Johnson syndrome (SJS) is a severe mucocutaneous reaction with devastating clinical course. Drug toxicity is one of its primary causes. Capecitabine, an oral analogue of fluoropyrimidine, is a chemotherapy agent that inhibits DNA synthesis and slows the growth of cancer tissues, while pembrolizumab is a monoclonal antibody that binds to the PD-1 protein of immune cells, blocking their interaction with the PD-L1 and PD-L2 ligand of cancer cells. They had many side effects and SJS is one of them.

## Medical History

A 71-year-old patient came to the emergency room with a severe rash all over her body with bullae and erythematous lesions peri buccal and palatal, not responsive at home on cortisone and antihistamines. He reported starting the first cycle of capecitabine after treatment with pembrolizumab for metastatic esophageal squamous adenocarcinoma. Transferred to the dedicated medical department, she was treated with intravenous corticosteroid therapy and wash out drugs [1].

## Table

| | Blood test at access | Blood tests at transfer to ward |
|---|---|---|
| ALT | 101 UI/L | 59 UI/L |
| AST | 30 UI/L | 30 UI/L |
| albumine | 4.0 g/dL | 4.0 g/dL |
| GGT | 114 UI/L | 104 UI/L |
| Red Blood Cells | 4.29 x103 UI/L | 4.06 x103 UI/L |
| Hb | 12.9 g/dl | 12.4 g/dl |
| Platelets | 213 x103 UI/L | 225 x103 UI/L |
| White Blood Cells | 12.58 x103 UI/L | 10.17 x103 UI/L |
| Neutrophils | 9.77 x103 UI/L | 6.56 x103 UI/L |
| PCR | 0.56 mg/L | 1.9 mg/L |
| PCT | 0.7 ng/ml | 0.4 ng/ml |
| Creatinine | 5.12 mg/dl | 4.25 mg/dl |
| Urea | 117 mg/dl | 66 mg/dl |
| Sodium | 141 mEq/L | 143 mEq/L |
| Osmolarity | 307 mOsm/L | 315 mOsm/L |
| Potassium | 5.5 mEq/L | 4.6 mEq/L |

## Discussion

Although widely accepted for many cancers due to the improved safety and tolerability profile, capecitabine and especially pembrolizumab may cause particularly when combined adverse events very detrimental to patients' health, such as SJS. Monitoring the effects of these drugs from the first administration is important to manage them in time [2].

## References

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