# STEVENS—JOHNSON SYNDROME IN A PREGNANT WOMAN CAUSED BY PYRIMETHAMINE AND SULFADIZINE

C. ORTÍ JUAN<sup>1</sup>, A. PÉREZ PLASENCIA<sup>1</sup>, A. FAYET PÉREZ<sup>1</sup>, E. NOGUÉ PUJADAS<sup>1</sup>, X. LARREA URTARAN<sup>1</sup>, Q. LÓPEZ NOGUERA<sup>1</sup>, C. DÍEZ VALLEJO<sup>1</sup>, M. BRUGUERA TEIXIDOR<sup>1</sup>, <u>A. DORDÀ BENITO</u><sup>1</sup>, R. SACREST GÜELL<sup>1</sup>.

1HOSPITAL UNIVERSITARI DR. JOSEP TRUETA, PHARMACY DEPARTMENT, GIRONA, SPAIN.

## **Background and importance**

Stevens-Johnson syndrome (SJS) is a rare and serious skin drug reaction, the pathogenesis of which includes genetic factors. If it occurs in pregnant women, both conditions can simultaneously affect the mother and the fetus.

# Aim and objectives

To determine the contribution of the pharmacist in the treatment of a rare drug side effect.

## Material and methods

Small cystic images was identified on 42-year-old pregnant woman at 28 weeks' gestation by ultrasonography and neurosonography. A transplacental amniocentesis was conducted to rule out infections and the Toxoplasma Gondii PCR in amniotic fluid was positive. Patient began oral treatment with pyrimethamine tablets 50 mg/24h, sulfadiazine 1500 mg/12h and folinic acid 7.5 mg/24h orally.

I2 days after starting treatment, the patient went to the emergency department of our hospital due to the appearance of a skin rash on the abdomen and lower extremities, skin irritation and fever; therefore, she was admitted to the hospital.

#### Results

The patient presented feverish peaks during admission with worsening of the rash and painful laterocervical lymphadenopathy. In addition, she has anemia, leukopenia, and thrombocytopenia attributed to this treatment. Treatment with pyrimethamine and sulfadiazine was discontinued due to suspected toxicity. The diagnosis was oriented to SJS secondary to pyrimethamine and sulfadiazine. Due to the worsening and the clinical dermatological severity of the patient, after consulting the pharmacist, it was considered necessary to start cyclosporine 120 mg every 12h (2mg/kg/12h) intravenously (off-label use). She was finally referred to another hospital due to the worsening of the SJS. During the admission there, treatment with cyclosporine was not maintained, there was a progressive improvement of the skin lesions, and she was discharged due to a favorable evolution.

### Conclusion and relevance

The pharmacist validated the treatment during the patient's hospital stay and reviewed the interactions and adverse reactions associated with the prescribed medications, confirming the possible causality of SJS by pyrimethamine and sulfadizine. Moreover, the clinical pharmacist performed a bibliographic search and evaluated the benefit-risk balance of off-label medications in special situations. Finally, it should be noted that few cases of SJS have been reported during pregnancy, so the pharmacist notified the adverse reaction to the Spanish Pharmacovigilance System.

#### References

- 1. Montoya JG, Remington JS. Management of Toxoplasma gondii infection during pregnancy. Clin Infect Dis. 2008;47(4):554-66.
- 2. Ben-Harari RR, Goodwin E, Casoy J. Adverse Event Profile of Pyrimethamine-Based Therapy in Toxoplasmosis: A Systematic Review. Drugs R D. 2017;17(4):523-544.
- 3. Velter C, Hotz C, Ingen-Housz-Oro S, Wolkenstein P, Fardet L. Stevens-Johnson Syndrome During Pregnancy: Case Report of a Newborn Treated With the Culprit Drug. JAMA Dermatol. 2018;154(2):224-225.
- 4. Ng QX, De Deyn MLZQ, Venkatanarayanan N, Ho CYX, Yeo WS. A meta-analysis of cyclosporine treatment for Stevens-Johnson syndrome/toxic epidermal necrolysis. J Inflamm Res. 2018; 11:135-142.
- 5. Paziana K, Del Monaco M, Cardonick E, Moritz M, Keller M, Smith B, Coscia L, Armenti V. Ciclosporin use during pregnancy. Drug Saf. 2013;36(5):279-94.

Contact: cortij.girona.ics@gencat.cat





