

Indolent systemic mastocytosis without skin involvement vs. isolated bone marrow mastocytosis

We have read with great interest the paper by Zanotti *et al.*¹ about the description of "Isolated bone marrow mastocytosis" (BMM) as an underestimated subvariant of indolent systemic mastocytosis (ISM). This is a very interesting paper in which an in depth study was performed in a total of 99 consecutive ISM patients, diagnosed either prospectively or retrospectively according to the 2008 WHO classification.² However, the term used to define the series of BMM might not be the most appropriate and may lead to confusion in the field.

In Zanotti's report, after an in depth study, 46 of 84 patients (54.7%) who were referred because of unexplained/recurrent anaphylaxis or severe allergic reactions to hymenoptera sting in the absence of typical skin lesions (e.g. mastocytosis in the skin; MIS), were classified as BMM.

It is noteworthy that, indolent systemic mastocytosis (ISM) in the absence of skin involvement (ISMs-) has been previously recognized and described by several groups. In fact, it was first recognized as a clinical entity in 1991³ and later, its clinical, biological, morphological, immunophenotypical and KIT mutational characteristics have been established in a large series of cases.⁴ In addition, Dr. Zanotti co-authored an elegant paper on hymenoptera venom anaphylaxis and mastocytosis in which patients lacking MIS but fulfilling criteria for SM are classified as ISMs-.⁵ Detailed analysis of the reported isolated BM mastocytosis cases¹ shows that most likely they correspond to the previously identified ISMs-patients.

It should be emphasized that ISMs- clearly differs from isolated BM mastocytosis in that the latter is an exceptional subcategory of ISM in the absence of both skin lesions and MC-mediator related symptoms. In addition, subjects with isolated BM mastocytosis typically show a low MC burden^{2,6} and their diagnosis is occasionally made during a BM study for pathological conditions other than mastocytosis, due to its clinically silent behavior (only 5 cases in our data base, Spanish Network on Mastocytosis-REMA-, *data not shown*).

Conversely, ISMs- is a "true" systemic disease based on the observation of systemic mast cell-mediator related symptoms, difficult to explain in a BM restricted MC condition. ISMs- is also frequently associated with osteoporosis and presence of multilineal KIT mutations is detected in 3 out of 47 cases (6.7%) in our published series⁴ and in a total of 4 out of 62 (6.4%) cases in the updated REMA's data base (REMA, *unpublished data*, 2011) which confers to these patients an increased probability for disease progression.⁷

The term isolated BM mastocytosis may lead the readership not familiar with this disease to consider this con-

dition to be benign and of a localized nature, when in fact it may be associated with life-threatening or even fatal anaphylaxis with possibly around 5% of cases progressing to aggressive disease.

Luis Escribano,¹ Ivan Alvarez-Twose,¹ Andres Garcia-Montero,² Laura Sanchez-Muñoz,¹ Maria Jara-Acevedo,² and Alberto Orfao²

¹Instituto de Mastocitosis de Castilla La Mancha, Hospital Virgen del Valle, Toledo; ²Servicio General de Ciometría, Centro de Investigación del Cáncer (IBMCC-CSIC/USAL) and Departamento of Medicine, University of Salamanca, Spain. Spanish Network on Mastocytosis.

Correspondence: Luis Escribano, MD, PhD, Instituto de Mastocitosis de Castilla La Mancha, Hospital Virgen del Valle, Toledo, Spain; E-mail: lescribanom@sescam.jccm.es

Key words: bone marrow mastocytosis, fracture, osteoporosis.

Citation: Escribano L, Alvarez-Twose I, Garcia-Montero A, Sanchez-Muñoz L, Jara-Acevedo M, Orfao A. Indolent systemic mastocytosis without skin involvement vs. isolated bone marrow mastocytosis *Haematologica* 2011; 96(4):e26. doi:10.3324/haematol.2011.040865

The information provided by the authors about contributions from persons listed as authors and in acknowledgments is available with the full text of this paper at www.haematologica.org.

Financial and other disclosures provided by the authors using the ICMJE (www.icmje.org) Uniform Format for Disclosure of Competing Interests are also available at www.haematologica.org.

References

- Zanotti R, Bonadonna P, Bonifacio M, Artuso A, Schena D, Rossini M, et al. Isolated bone marrow mastocytosis: an underestimated subvariant of indolent systemic mastocytosis. *Haematologica*. 2011;96(3):482-4.
- Horny HP, Metcalfe DD, Bennet JM, et al. Mastocytosis. In: Swerdlow SH, Campo E, Harris NL et al., eds. WHO classification of tumours of haematopoietic and lymphoid tissues. Lyon: IARC; 2008:54-63.
- Metcalfe DD. Clinical advances in mastocytosis: an interdisciplinary roundtable discussion. *J Invest Dermatol*. 1991;96:suppl:1S-65S.
- Alvarez-Twose I, Gonzalez de Olano D, Sanchez-Munoz L, et al. Clinical, biological and molecular characteristics of systemic mast cell disorders presenting with severe mediator-related symptoms. *J Allergy Clin Immunol*. 2010;125(6):1269-78.
- Bonadonna P, Perbellini O, Passalacqua G, Caruso B, Colarossi S, Dal Fior D, et al. Clonal mast cell disorders in patients with systemic reactions to Hymenoptera stings and increased serum tryptase levels. *J Allergy Clin Immunol*. 2009;123(3):680-6.
- Valent P, Akin C, Escribano L, Födinger M, Hartmann K, Brockow K, et al. Standards and standardization in mastocytosis: consensus statements on diagnostics, treatment recommendations and response criteria. *Eur J Clin Invest*. 2007;37(6):435-53.
- Escribano L, Alvarez-Twose I, Sánchez-Muñoz L, Garcia-Montero A, Núñez R, Almeida J, et al. Prognosis in adult indolent systemic mastocytosis: A long-term study of the Spanish Network on Mastocytosis in a series of 145 patients. *J Allergy Clin Immunol*. 2009;124(3):514-21.