

elderly patients with AML *less is more*. Many patients, surprisingly including the group with the most favorable prognosis, did not profit from standard induction therapy and had a comparable outcome with palliative therapy. However, in some patients, such as those with a high white cell count, standard induction therapy may be superior to palliative therapy. Clearly, further studies to evaluate risk factors, molecular biology and detailed quality of life aspects of the elderly patients with AML are needed. If we learn more about the diversity of AML in the elderly, we will be able to create differential treatment strategies with better risk-benefit ratios for the individual patient and responsible use of existing resources. This could result in a general improvement of the unfavorable outcome of elderly AML patients, which has remained almost unchanged since the 1980s.

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## Familial lymphoid neoplasms in patients with mantle cell lymphoma

The concise, well-written paper by Tort *et al.*<sup>1</sup> is essentially an extended case report of three kindred with familial lymphoproliferative disease (LPD) presenting with mantle cell lymphoma (MCL). The authors are correct that this is the first report of familial MCL. The caveat that CLL and MCL may have been missed in earlier studies is undoubtedly also true. Since the earliest reports from Ardashnikov in 1937<sup>2</sup> and Videbaek in 1947,<sup>3</sup> various studies<sup>5-8</sup> have made it become more widely appreciated that of all of the leukemias, chronic lymphocytic leukemia or small lymphocytic lymphoma (CLL/SLL) shows the highest incidence of familial clustering.<sup>9-12</sup> This has led to the appreciation of familial LPD. In fact it is not uncommon to see three different LPD in the same family, i.e., CLL/SLL, Waldenström's macroglobulinemia and hairy cell leukemia, and in familial CLL one sometimes encounters non-lymphoid, hematologic malignancy in first degree relatives. The pattern can be sibling-sibling, parent offspring or a combination of both types.

This study shows that MCL can also be part of the familial LPD syndrome. The appearance of acute lymphoblastic leukemia (ALL), CLL and a lymphoplasmacytic lymphoma in these MCL kindreds and the observation of anticipation are not unexpected findings.<sup>13,14</sup> Both have been described in familial CLL. The probands in families 1 and 2 had unmutated germline Ig genes and no ATM mutations were found in the patients tested. This information is useful as it permits comparison with other familial LPD, i.e., no pattern of Ig gene or ATM mutations has been seen in CLL.<sup>15,16</sup> Other pathways must be sought for the molecular mechanisms of familial LPD. These findings are of clinical relevance. Early presentation of LPD in a 40-year old should raise the question of a familial disposition in either one of the parents or other siblings. Inquiring about a positive

family history needs to be done more than once. In addition to anticipation, the cause of death is more often attributed to CLL rather than other associated medical conditions of the aged. Prolymphoid transformation and the occurrence of second primary neoplasms are thought to be more frequent in familial CLL.<sup>14</sup> Recently several groups have detected a B cell monoclonal lymphocytosis (BCML) or expansion in environmental studies, blood bank donors and aging individuals.<sup>17-20</sup> and BCML as a precursor state can be used as a surrogate marker in first degree relatives in familial CLL.<sup>21,22</sup> Although there are some ethical considerations about what to tell patients who have BCML, this can be problematic when it occurs in an unaffected HLA matched sibling. Regardless, BCML in the setting of familial MCL, CLL or LPD offers not only the potential for early detection but also the opportunity to study early molecular events in the pathogenesis of these disorders.

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## Expansion of cord blood hematopoietic stem cells for clinical application

Umbilical cord blood is a realistic alternative to mobilized peripheral blood or bone marrow transplantation in children.<sup>1</sup> The use of umbilical cord blood for allogeneic transplantation has been hindered in adults by the concern that a single collection may contain insufficient numbers of hematopoietic stem cells. Several papers on cord blood hematopoietic stem cells have appeared in this journal in the last two years.<sup>2-10</sup> In this issue Zhai and co-workers<sup>11</sup> describe a short-term *ex vivo* expansion protocol that sustains the homing-related properties of umbilical cord blood hematopoietic stem and progenitor cells. In *This Month in Haematologica* section (see page 257), Carmela Calés illustrates the interest of this Chinese study.

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