Blood

Volume 99 Issue 6 Page 1995 - March 2002

Health-related quality of life of unrelated bone marrow donors in Japan.

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To promote bone marrow donation, both the safety and well-being of healthy unrelated volunteer donors must be protected. This prospective cohort study evaluated donors' health-related quality of life (HRQOL) and identified factors associated with it. Using the Medical Outcomes Study Short Form 36 Health Survey (SF-36) before bone marrow harvesting (BMH), and again 1 week and 3 months after the donors' discharge, we evaluated HRQOL of 565 donors (329 men, 236 women) registered with the Japan Marrow Donor Program (JMDP). We also examined the data routinely collected by the JMDP, such as BMH-related problems and other demographic and medical variables, to determine whether such data could be used to predict donors' HRQOL after discharge. Mean scores of all pre-BMH SF-36 subscales showed better functioning than the national norm. One week after discharge, mean scores on physical functioning (PF) and role-physical (RP) subscales, indicative of physical states, and bodily pain (BP) were approximately 1 SD lower than the national norm; however, mental health (MH) and general health perception (GH) remained above normal; the most frequent BMH-related problems were pain at the donation site and lower back pain, which were associated with lower PF, RP, and BP scores. Female gender and duration of procedure predicted lower PF, RP, and BP. Three months after discharge, mean scores of all SF-36 subscales had returned to baseline levels. These data show that the adverse effects of BMH on donors' HRQOL are transient and can be minimized by better management of pain.