

Accepted Manuscript

The Metabolic Syndrome in long-term survivors of Haematopoietic Stem Cell Transplantation

S.C. Ragbourne, BSc, MB BS, M.A. Crook, BSc, MB BS, MA, PhD, FRCPath, FRCPI, FRCP

PII: S2152-2650(17)30087-3

DOI: [10.1016/j.clml.2017.05.004](https://doi.org/10.1016/j.clml.2017.05.004)

Reference: CLML 920

To appear in: *Clinical Lymphoma, Myeloma and Leukemia*

Received Date: 17 January 2017

Revised Date: 29 March 2017

Accepted Date: 4 May 2017

Please cite this article as: Ragbourne S, Crook M, The Metabolic Syndrome in long-term survivors of Haematopoietic Stem Cell Transplantation, *Clinical Lymphoma, Myeloma and Leukemia* (2017), doi: 10.1016/j.clml.2017.05.004.

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting proof before it is published in its final form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.



1 **The Metabolic Syndrome in long-term survivors of Haematopoietic Stem**
2 **Cell Transplantation**

3
4 Ragbourne SC (1) BSc, MB BS and Crook MA (1) BSc, MB BS, MA,
5 PhD, FRCPATH, FRCPI, FRCP*

6
7
8 *address for correspondence at Department of Clinical Biochemistry and
9 Metabolic Medicine, Guy's Hospital, London SE19RT UK. Telephone/Fax
10 0044 (0) 02083333000 (1)

11
12 *Professor Martin Crook, Consultant in Chemical Pathology and Metabolic
13 Medicine. Dept of Clinical Biochemistry and Metabolic Medicine, University
14 Hospital Lewisham and Guy's and St Thomas' Hospitals and Visiting
15 Professor at the University of Greenwich, London and Trinity College Dublin.
16 email address; martin.crook@doctors.org.uk

17
18 Key words/MESH words; bone marrow transplant, diabetes mellitus, lipids,
19 metabolic syndrome, obesity, statins

20
21 **DECLARATIONS**

22 **Competing interests:** None

23 **Funding:** None

24 **Ethical approval:** N/A as review article

25 **Guarantor:** MAC

26
27
28
29 The Metabolic Syndrome in long-term survivors of Haematopoietic stem cell transplantation

30
31 Abstract

32 Since its introduction more than fifty years ago, haematopoietic stem cell transplantation
33 (HSCT) has transformed from an inescapably fatal procedure to one where cure from
34 malignant and other non-malignant haematological diseases is becoming increasingly
35 common. Nevertheless, longevity is not entirely restored. New causes of mortality have
36 emerged; of particular importance is that of increased cardiovascular disease (CVD), related
37 to metabolic syndrome (MS) and its components. Controversy exists over whether the
38 metabolic abnormalities induced are a direct effect of HSCT itself or a consequence of other
39 therapies involved. Analysis of the mechanisms which promote the changes in metabolic
40 components will give insight into future HSCT therapy and also CVD pathogenesis and
41 prevention.

42
43 Introduction

44 Haematopoietic stem cell transplantation (HSCT) describes bone marrow reconstruction
45 through the administration of donor, either autologous, allogeneic or syngeneic,
46 hematopoietic progenitor cells that originate from the peripheral blood, umbilical cord
47 blood or bone marrow. The use of HSCT has expanded considerably since the early
48 pioneering work of Nobel laureate E.D. Thomas and his colleagues who recognised its

Download English Version:

<https://daneshyari.com/en/article/5581769>

Download Persian Version:

<https://daneshyari.com/article/5581769>

[Daneshyari.com](https://daneshyari.com)