

even a clinically trained MD could perform it successfully. (Note: The author is a clinically trained MD.) But now robust is degenerating into merely a trendy way of saying “good.”

At a recent meeting I counted 8 consecutive speakers who used the word “robust” in their presentations, as if infectious robustitis were spreading from one to the next like a meme, a “virus of the mind.”¹ The speaker who mercifully broke the “robust” string spent most of her talk struggling with the unfamiliar data projector (a robust and universal standard for these is desperately needed) and also had laryngitis, forcing minimalist language.

It is possible to make a robust point without using the word “robust.” Literary standards such as the complete works of Shakespeare (37 plays and 154 sonnets), the King James Bible, and Bulfinch’s mythology² do not use the word “robust” even once. Despite plenty of robust structures in the human body, there is only a single “robust” descriptor buried in the 1396 pages of Henry Gray’s anatomical classic.³ *Bartlett’s Quotations* does not contain one aphorism with the word “robust,” proving that witty and clever sayings can exist in a robust-less world.

In contrast to this parsimony, among the 5739 abstracts submitted for the 2002 American Society of Hematology (ASH) annual meeting, a whopping 53 contained the word “robust”; in 2001 there were 36. Interestingly, there appears to be an acceptance bias in favor of abstracts containing the word “robust”: in 2002, 83% (44 of 53) of ASH abstracts containing “robust” were chosen for presentation, whereas only 60% of all submitted abstracts escaped the stigma of “publication only.” In 2001, the same trend existed (78% “robust” accepted vs 66% overall). In contrast to words like “robust” and “molecular” (76% presentation rate in 2001 and 73% in 2002), the term “descriptive”⁴ is the kiss of death for an ASH abstract: a 42% accept rate in 2001-2002, and almost all of the accepted abstracts in this group used “descriptive” to refer to statistics, not science. The take-home message is crystal clear: all my future ASH abstracts will gratuitously use the words “robust” and “molecular” and will avoid “descriptive” like the plague.

This tiresome use of “robust” is not unique to hematology. The American Society of Clinical Oncology suffers from the same disease, although at an earlier stage: 47 “robust” meeting abstracts spread over the last 3 years. The American College of Cardiology suffered 10 “robust” abstracts this year, while “Digestive Disease Week 2003” featured 16 “robust” abstracts among the nearly 5000 presented. Surprisingly, orthopedic surgery, the specialty of choice for Olympic athletes and football linebackers seeking a career change and blessed with many physically robust individuals, remains unaffected: at their big annual meeting, only 1 orally presented abstract in the last 3 years has been “robust.”

If we are to rescue this word before it becomes as cliché as “proof of principle,” “elegant,” and “intriguing,” we must act soon. One way of highlighting and remedying the overuse of the word “robust” might be to declare a “Robust-Free Day” at the next ASH annual meeting. On this day, all speakers caught using the word “robust” would be required to buy a drink for the first 3 rows of the audience. The author welcomes other robust suggestions; you will find me at the front of the room in the plenary sessions at ASH, waiting to collect my free drinks.

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To the editor:

Safety and efficacy of subcutaneous bolus injection of deferoxamine in adult patients with iron overload: an update

Multiply transfused patients, such as those with hematologic malignancies undergoing chemotherapy or those with thalassemia major, develop iron overload which in time becomes responsible for organ damage and dysfunction. Iron chelation therapy is therefore necessary to prevent or decrease the iron burden.^{1,2} Subcutaneous continuous infusion of deferoxamine mesylate (DFO) through a battery-operated portable pump is the most effective and safest method of preventing or treating iron overload, but it is very demanding since it requires the patients’ compliance for 8 to 12 hours daily. For this reason, alternative iron chelating approaches have been developed in the last few years.³ Borgna-Pignatti and Cohen⁴ first demonstrated in 1995 in thalassemic patients that the 48-hour DFO-induced urinary iron excretion after twice-daily subcutaneous bolus injections of deferoxamine is similar to that after continuous infusion. Subsequently, other studies confirmed these findings in thalassemic and nonthalassemic iron-overloaded patients.⁵⁻⁸ More recently, we documented the long-term safety and

efficacy of this method in 26 iron-overloaded adult patients.⁹ Since then, we have received many letters from colleagues who wanted to start such a method of administration or who asked us for an update of our patients. The great interest around twice-daily subcutaneous bolus injections of DFO, still existing 3 years after the publication of our study, despite the fact that this method has not been licensed by the pharmaceutical company producing DFO (Novartis Pharma, Origgio, Italy), gives us the opportunity to review our series and make some considerations.

During the follow-up period (April 1999 to September 2003), 7 of the 15 regularly transfused patients (patient nos. 3, 5, 9, 10, 15, 19, and 22) of the first group died due to disease progression, whereas 3 of the remaining 8 patients (patient nos. 1, 12, and 14) complained of the large volume of the single bolus injection (10 mL), which caused a postinjection, painful swelling that lasted several hours (12 to 24 hours), and these patients chose to continue chelation therapy with the standard subcutaneous continuous

Table 1. Response to twice-daily subcutaneous bolus injections of deferoxamine: update of old and new cases

Patient no.*	Diagnosis	Age, y/sex	Initial ferritin level, $\mu\text{g/L}\dagger$	TIL before chelation, mg/kg‡	TIL during chelation, mg/kg‡	UIE after DFO bolus, $\mu\text{g/48 h}$	UIE after DFO infusion, $\mu\text{g/48 h}$	Follow-up time, mo	Last ferritin value, $\mu\text{g/L}$
4	IMF	61/M	2100	261.0	316.1	7880	11 530	74	816
6	CML, CP	48/F	1670	195.8	427.2	13 000	11 390	79	550
7	NHL, LG	77/F	1130	95.2	419.0	4144	3737	78	670
8	MDS, RA	51/F	685	89.8	422.7	7703	6790	81	522
17	MDS, RAS	63/F	2153	232.0	360.5	11 050	13 480	72	1120
28	MDS, RA	57/F	1466	110.7	192.0	8728	10 218	38	710
29	MDS, RAEB-t	76/M	3592	255.1	158.4	4256	2880	35	1912
30	MDS, RA	45/M	1875	129.4	118.4	11 010	8860	21	1235
31	MDS, RA	64/M	2510	174.0	94.1	7010	3900	12	1930
32	MDS, RAEB	63/F	829	83.1	126.7	9870	13 220	26	435
33	MDS, RAEB	59/M	1254	96.7	101.3	6190	5310	13	630
34	RCA	55/F	781	77.0	226.1	3330	3412	51	432
Mean (\pm SD)			1670.3 (\pm 843.9)	150.0 (\pm 70.1)	246.9 (\pm 134.0)	7847.6 (\pm 3047.6)	7893.9 (\pm 4019.3)	46.8 (\pm 28.9)	913.5 (\pm 532.0)

UIE indicates urinary iron excretion; IMF, idiopathic myelofibrosis; MDS, myelodysplastic syndrome; RA, refractory anemia; RAS, refractory anemia with ring sideroblasts; RAEB, refractory anemia with excess of blast cells; RAEB-t, refractory anemia with excess of blast cells in transformation to AML; CML, chronic myeloid leukemia; CP, chronic phase; NHL, non-Hodgkin lymphoma; LG, low grade; TIL, transfusional iron load; and RCA, red cell aplasia.

*Patient nos. 4, 6, 7, 8, 17 are old cases; patient nos. 28-34 are new cases.

†Normal range of serum ferritin concentration: 15 $\mu\text{g/L}$ to 250 $\mu\text{g/L}$.

‡Transfusional iron load (TIL) before chelation therapy (expressed as the total amount of iron transfused per kilogram of body weight) and TIL during chelation therapy (expressed as the total amount of iron transfused during the follow-up time [months] per kilogram of body weight).

infusion of DFO. The data from the 5 patients who remained in the study, together with data from 7 additional cases, are shown in Table 1. We did not record any adverse events in the 7 new cases, after a median follow-up of 28 months. As regards the second group of 11 transfusion-independent patients, 3 patients (patient nos. 16, 23, and 27) died due to progression/relapse of disease and 2 patients (patient nos. 18 and 26), who are still alive, came out of the protocol because they restarted chemotherapy due to relapse of the hematologic malignancy. In the remaining 6 patients (patient nos. 11, 13, 20, 21, 24, and 25), the twice-daily subcutaneous bolus injections of DFO normalized ferritin levels. In these patients, who did not require transfusions during the follow-up after chemotherapy, DFO bolus injections were stopped once normal ferritin levels had been reached. The ferritin levels were then monitored every 3 months. Patient number 20 (with spherocytosis and hereditary hemochromatosis) started a maintenance phlebotomy program with bolus injection of DFO due to an increase of serum ferritin levels (780 $\mu\text{g/L}$).

Although the newly reported cases further testify to the efficacy of this method, there are some concerns regarding the long-term tolerance of DFO bolus injections. In fact, examining the follow-up of the previously published cases, we found that 3 of the 8 patients who remained in the study did not tolerate the volume of the bolus injections, preferring the subcutaneous continuous infusion. The pharmaceutical company producing DFO recommends a 10% final concentration of the drug, because higher concentrations have been shown to be associated with a higher incidence of local reactions at the injection site.¹⁰

Long-term follow-up trials on larger populations of patients are needed in order to clarify the real incidence of adverse reactions in

patients using twice-daily subcutaneous bolus injections of deferoxamine.

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To the editor:

Autologous hematopoietic stem cell transplantation for severe/refractory intestinal Behcet disease

Behcet disease is a chronic inflammatory disorder of unknown etiology characterized by recurrent oral aphthous ulcers, genital ulcers, skin lesions, and uveitis.¹ It has long been postulated that

immunologic abnormalities, which are possibly triggered by microbial pathogens in genetically susceptible individuals (strong association with HLA-B51), are important in its pathogenesis.² Recent