LETTERS TO THE EDITOR

APARTHEID AND MEDICAL EDUCATION

To the Editor:

I have read the article in the Journal by Phillip Tobias, "Apartheid and Medical Education: The Training of Black Doctors in South Africa" (*J Natl Med Assoc* 72 (4):395-410, 1979). I must congratulate you on being able to secure his consent to undertake this paper. It was indeed very courageous of him to write in such a forthright manner. It is an article that is worth preserving.

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LEUCOPENIA AND THROMBOCYTOPENIA WITH CIMETIDINE

To the Editor:

Leucopenia and thrombocytopenia, rare hematologic side effects of cimetidine therapy, are reversible.[1-5] The myelotoxicity may manifest within days or months and the bone marrow study may reveal an active[2] or hypocellular marrow.[5]

Case Report

A 64-year-old woman was admitted to Downstate Medical Center for bilateral uretero-transverse colostomy with a single midline stoma. Thirteen years prior to this admission she underwent a Wertheim radical hysterectomy and radiation therapy for uterine cervical cancer, followed by cutaneous ureterostomy for contracted bladder and bilateral ureteric stricture. She underwent ureterocolostomy three days after admission. Postoperatively the patient became febrile and received gentamicin and clindamycin. She developed upper gastrointestinal bleeding on the third postoperative day and was placed on intravenous cimetidine 300 mg every six hours. On the fifth day of cimetidine therapy, leucopenia and thrombocytopenia were noted. Three days after the discontinuation of cimetidine the leucocyte and platelet count returned to normal (Table 1).

Discussion

Myelotoxicity of cimetidine is a rare phenomenon that is reversible. Leucopenia and thrombocytopenia may manifest within days[2] or months,[1] and bone marrow studies may show normal[2] or hypocellular[5] marrow. Byron[6] suggests that the hematologic side effects are due to H_2 receptor antagonism of pleuripotent stem cells. However, this view is not universally accepted[7] and needs further clarification.[8] The underlying disease state and concomitant use of other drugs may also play a role in causing the leucopenia and thrombocytopenia.[8]

Although it cannot be proven

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TABLE 1. SERIAL HEMOGLOBIN, WHITE CELL, AND PLATELET COUNTS

Day	Hemoglobin gm/100 ml	White cells cu mm	Platelets cu mm
−7	10.1	7,500	—
−2*	11.7	16,400	220,000
1	9.8	9,200	—
2	9.4	6,000	—
4	11.4	4,300	95,000
5	10.5	3,000	—
7	11.9	4,900	—
8	11.4	5,200	245,000

*Postoperatively patient was febrile

that cimetidine caused the leucopenia and thrombocytopenia in our patient, no other etiological agents could be noted, as all other medications were continued through this period. Unfortunately a bone marrow study was not obtained in our patient.

Summary and Conclusions

A 64-year-old woman who received cimetidine for upper gastrointestinal bleeding developed reversible leucopenia and thrombocytopenia. We recommend close monitoring of leucocytes and platelets in all patients receiving cimetidine and prompt withdrawal of the drug when myelotoxicity develops. A bone marrow study during the acute and recovery phase is helpful in understanding the pathology involved.

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