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# **EDITORIAL**

10.1038/s41409-023-02015-2

# Blood, sex and haematology

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Bone Marrow Transplantation (2023) 58:963–964; https://doi.org/

"With beaded bubbles winking at the brim, and purple stained mouth: That I might drink and leave the world unseen..."

John Keats. English Poet Fig. 1. 1795-1821. Ode to a Nightingale.

The legend of the vampire (Vampyre) has been around since the ancient Greeks and probably before that. It came to prominence in the English-speaking world in the early 18th century thanks to the group known as the Romantic poets, in England, that included Lord Byron, P.B. Shelley, John Keats, Mary Wollstonecraft (author of Frankenstein and wife of P.B.Shelley), John Polidori (a physician) and others. The legend of the vampire is of a creature, often with fanged teeth, who consumes human blood of which it requires a constant supply. They are believed to be 'undead' i.e. being revived after death. They are not supposed to cast a shadow and there is no reflected image in a mirror. The most effective way of destroying them is to drive a stake through their heart. I'm not sure if the Romantic poets indulged in wine drinking but the consumption of hallucinogenic drugs seems to have been de riqueur amongst them and probably influenced their writings.

John Polidori was a young English-Italian physician [1] and personal physician to the poet George Byron (commonly known as Lord Byron). Together with a number of friends they stayed as Byron's quests in Villa Diodati on Lake Geneva, Switzerland, and on a stormy evening Lord Byron (again probably influenced by hallucinogenic drugs) suggested that they all write a ghost story. Polidori wrote, what is believed to be the first vampire novel in English (initially wrongly attributed to Lord Byron).

There are vampire legends in almost every culture and they take various shapes and forms. I first encountered the vampire legend while in Malaysia, (Lamia/Lamya) although Lamia probably originated in Greece. There are other myths including Lilith Fig. 2, who seems to be a Hebrew vampire, perhaps the first wife .of Adam and the inspiration for a number of erotic paintings. She also occurs in Greek mythology when she copulated with Zeus and bore children. Hera, the wife of Zeus was very annoyed and killed the children and Lamia (who was very beautiful) was turned into an ugly monster who consumed many babies as revenge.

Mary Wollstonecraft, one of the romantic poets, is purported to have written the novel Frankenstein although some believe the author was P.B.Shelley. A number of authors have recently suggested that the novel is a potent homo-erotic work. The author, however, who popularised the vampire legend in the English-speaking world was Dubliner and Trinity College, graduate, Bram Stoker, through his novel Dracula Fig. 3. Although this novel was largely concerned with the vampire legend there is also an explicit sexual connotation. Jonathan Harker (who probably represents 'everyman' in the novel) is quoted as saying: 'The fair girl went on her knees and bent over me, fairly gloating. There was a deliberate voluptuousness which was both



Fig. 1 John Keats. John Keats, English Romantic poet 1795–1821.

Here lies One

lamewas writ in We

thrilling and repulsive, and as she arched her neck she actually licked her lips like an animal... I could feel the soft, shivering touch of the lips on the super-sensitive skin of my throat, and the hard dents of two sharp teeth, just touching and pausing there'. Jonathan Harker remembers this interaction, whether in a dream or reality! Interestingly Sheridan Le Fanu's novel (another Dubliner and graduate of Trinity College) Carmilla [2], was a vampire novel devoted to female/female love and published before Dracula. It is short and beautifully written, and probably had some influence on Bram Stoker.

As far as I can see there is no record of vampires being treated with Haemopoietic Stem Cell Transplantation (HSCT) but the outcome is an interesting speculation. Some commentators suggest that the vampire legend may be based on Porphyria Cutanea Tarda (PCT) and again there is no evidence of HSCT being undertaken to cure this affliction. I can only find an abstract of HSCT for Erythropoietic Porphyrias in Pediatric patients [3].

As a haematologist my interest in the novel Dracula was stimulated, in part, by Stoker's knowledge of blood transfusion. Although the major blood groups were unknown in the 19<sup>th</sup> century and haemolytic transfusion reactions had yet to be discovered,

Received: 10 May 2023 Revised: 19 May 2023 Accepted: 31 May 2023

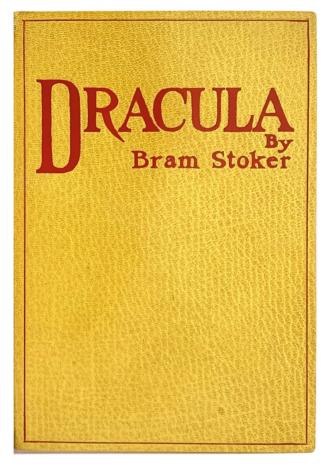
Published online: 8 June 2023



Fig. 2 Lilith, a female vampire who was reputed to exist on the blood of babies (she also may have been the wife of Adam, before Eve, hence the snake, I presume). John Collier 1887. Atkinson Art Gallery, UK. Public Domain.

Stoker observed that repeated bloodletting could lead to anaemia and heart failure. Heart failure could be relieved by blood transfusion. Defibrination was practised prior to experimental transfusion to prevent clotting before the use of anticoagulants was in common use. Professor van Helsing was called in as an expert to diagnose and treat Lucy in the book, and his comment: 'There is no time to be lost. She will die from sheer want of blood to keep the heart's action as it should be. There must be transfusion of blood at once' is appropriate. Not all of van Helsing's comments would be deemed to be to be acceptable in this century e.g. ' A brave man's blood is the best thing on earth when a woman is in trouble'. Not only would this statement be judged to be sexist but it also implies that blood contains a modicum of 'character' [4]. i.e. a brave man's blood is better than a cowards!

Whatever about drinking blood there a number of advantages to drinking red wine including purported protection from heart disease. There are some serious issues including alcoholic liver disease and the foetal alcohol syndrome (FAS). A less serious complication is staining of teeth as Keats says: 'purple stained



**Fig. 3 Dracula.** Dracula, a novel by Bram Stoker. Archibald Constable and Co. UK. 1897.

mouth'. The staining is probably due to acidity, tannins and anthrocyanins. In order to prevent dental discolouration some people suggest that avoiding drinking white wine before red may help. Easier said than done as a glass of Franciacorta, Cava or Champagne before dinner is common practise. Drinking sparkling water with a meal and brushing your teeth 30 min after a meal (if you remember) may help to prevent staining.

Staining of teeth is unsightly and seems to be treated differently in different cultures. Vampires are a myth which may be undergoing a renaissance, and wine certainly enhances a meal. It's really difficult to visualise a good meal without an accompanying glass of wine, red or white. Happy drinking,

Shaun McCann 10 <sup>1 ™</sup>

Bone Marrow Transplantation https://www.nature.com/bmt/.

™email: Shaunrmccann@amail.com

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#### **AUTHOR CONTRIBUTIONS**

All ideas and writing are solely by SMC.

### **COMPETING INTERESTS**

The author declares no competing interests.