

*Ricinus communis* is being studied as a potential therapeutic agent. One study demonstrated in-vitro antibacterial activity against *Staphylococcus aureus* and

### LEARNING POINTS

- Ricin ingestion presents in a similar manner to common viral gastroenteritis.
- Patients attempting suicide may have consulted an online 'manual'. This may facilitate more unusual and effective approaches.
- Ricin has been used as an agent of bioterrorism. Toxic effects vary depending on the route of administration.

*Pseudomonas aeruginosa* (Pesaramelli et al, 2012) while other investigators are focussing on ricin as a novel chemotherapeutic agent (De Virgilio et al, 2010; Zhang et al, 2012).

A pilot phase 1B clinical trial of recombinant ricin vaccine (RiVax) showed induction of neutralizing antibodies in healthy human volunteers (Vitetta et al, 2012).

This case highlights how patients can research novel approaches to suicide and procure toxins. Clinicians must be aware that patients may source information on the topic from the internet. **BJHM**

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Challoner K, McCarron M (1990) Castor bean intoxication: review of reported cases. *Ann Emerg Med* **19**: 1177–83

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### IMAGES IN MEDICINE

## Sudden apparent worsening of diabetic retinopathy leading to a diagnosis of chronic myeloid leukaemia

A 65-year-old woman with well-controlled type 2 diabetes presented with a sudden decrease in visual acuity bilaterally (right eye 6/60, left eye 6/18). The visual acuity had been documented as 6/6 in both eyes just 3 months previously, with stable mild diabetic retinopathy. Fundoscopy revealed extensive bilateral intraretinal haemorrhages (Figures 1 and 2).

Such sudden apparent worsening of diabetic retinopathy despite reasonable glycaemic control (glycosylated haemoglobin 8.0%) prompted further investigations to rule out causes of vascular occlusion. Full blood count showed an elevated white cell count ( $94.8 \times 10^9$ /litre, normal range  $3.6$ – $11.0 \times 10^9$ /litre) with neutrophilia ( $48.3 \times 10^9$ /litre, normal range  $1.8$ – $7.5 \times 10^9$ /litre) and myelocyte peak. All stages of myeloid

precursors were seen with partially degranulated basophils. She was Philadelphia chromosome (t9:22 translocation) positive. These results were consistent with chronic myeloid leukaemia. Following an urgent haematology review, imatinib (400 mg once daily reduced to 200 mg once daily after a week) was started with good results. The patient's blood count improved dramatically after 5 weeks of treatment, with a white cell count of  $6.4 \times 10^9$ /litre.

Prompt recognition of disease led to early referral and initiation of life-saving systemic treatment with imatinib, a signal transduction inhibitor designed to competitively inhibit BCR-ABL tyrosine kinase activity. According to the National

Institute for Health and Clinical Excellence (2012) guidance, imatinib is recommended as first-line treatment in Philadelphia chromosome-positive chronic myeloid leukaemia. Imatinib has transformed this leukaemia with a previously optimistic life expectancy of 4–6 years with interferon-based treatments into a true chronic illness with overall survival rates that appear to be increasing each year (Smith, 2011). **BJHM**

National Institute for Health and Clinical Excellence (2012) Dasatinib, nilotinib and standard-dose imatinib for the first line treatment of chronic myeloid leukaemia. Technology Appraisals TA251. <http://guidance.nice.org.uk/TA251> (accessed 21 July 2013)

Smith BD (2011) Imatinib for chronic myeloid leukemia: the impact of its effectiveness and long-term side effects. *J Natl Cancer Inst* **103**(7): 527–9

Figure 1. Image of right fundus.



Figure 2. Image of left fundus.



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