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Effect of general hospital management on repeat episodes of deliberate self poisoning: cohort study

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What is already known on this topic

The reference treatment for erysipelas is intravenous penicillin, which requires admission to hospital

Few studies have evaluated the efficacy of oral treatment for erysipelas

What this study adds

Oral pristinamycin is at least as effective as intravenous then oral penicillin to treat erysipelas in adult inpatients, with the advantage of oral first line treatment

non-inferiority of pristinamycin versus penicillin, the primary end point relies on the per protocol analysis.¹³ Full application of the intention to treat analysis will be possible only once complete outcome data become available for all randomised patients.¹⁷ Most of our non-assessable patients were excluded from the per protocol analysis because of adverse events leading to premature withdrawal, missing data, or use of prohibited treatment. Intention to treat analysis also confirmed the non-inferiority of pristinamycin as inclusion of non-compliers decreased the cure rates to similar extents in both groups.

Currently, pristinamycin is marketed only in some European countries. It is commonly used in France to treat erysipelas¹⁸ and superficial pyodermites¹⁹ in outpatients. Our results show that pristinamycin could be an alternative to intravenous then oral penicillin to treat erysipelas in adult inpatients. Whether this therapeutic strategy is valid for outpatients needs to be investigated.

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Contributors: See bmj.com

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Effect of general hospital management on repeat episodes of deliberate self poisoning: cohort study

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Provision of services in the United Kingdom for patients who deliberately poison themselves is variable, and many patients leave hospital without adequate assessments.¹ This may reflect the equivocal research evidence on the effectiveness of interventions.² In this cohort study, we aimed to investigate whether aspects of routine hospital management—such as admission, psychosocial assessment, and referral for follow up—had an impact on the repetition of deliberate self poisoning.

Participants, methods, and results

Over eight weeks, we prospectively identified patients aged over 16 years who attended six general hospitals

(three teaching; three district) in north west England for deliberate self poisoning. We examined the notes in accident and emergency departments for all patients (regardless of presenting complaint) to ensure that we did not miss any episodes. We also looked at databases held in wards and emergency departments and copies of specialists' self poisoning assessments, and we retrospectively checked the patient administration system in each hospital. We collected information about patients' characteristics, clinical details, and the management of the current episode, including whether the patient had received a psychosocial assessment (as defined by the Royal College of Psychiatrists).³ We followed participants for 12 weeks after their index episode, because half of those who poison themselves again do so within

this period.⁴ Follow up data were taken from case notes and databases by a researcher blind to the patient's initial management.

In total, 604 people deliberately poisoned themselves during the recruitment period; 88 (15%) of these poisoned themselves again within 12 weeks. Overall, 24/246 (10%) patients who had received a psychosocial assessment and 64/358 (18%) who had not received an assessment poisoned themselves again (table). Patients with certain risk factors for repetition—such as previous self poisoning, psychiatric history, and substance dependence—were more likely to receive a psychosocial assessment. We adjusted for these and other risk factors for repetition—such as sex, age, potential lethality of the episode, and self discharge from hospital—with a binary logistic regression model.⁵ We included psychosocial assessment in the model to investigate whether such assessment independently contributed to risk of repetition. After adjustment, patients who had not been assessed were still more likely to poison themselves again (adjusted odds ratio 2.3 (95% confidence interval 1.4 to 3.9), $P < 0.005$).

Comment

Patients who had received a psychosocial assessment after deliberately poisoning themselves were half as likely to poison themselves again as those who did not, even though the patients who were assessed might be regarded as being at higher risk. The association held when we adjusted for risk factors for repetition, although we did not adjust for all possible confounders. The better outcome in those who were assessed compared with those who were not assessed may have reflected the type of aftercare, but this study provides no evidence that referral to a specialist reduced repetition. Our results suggest that 12 patients need to receive a psychosocial assessment to prevent one patient poisoning himself or herself again. If we assume that 50% of patients are assessed currently, we might prevent 7000 repeat episodes of self poisoning by complying with existing guidelines and ensuring that all patients are properly assessed.³

Our results should be interpreted cautiously because they are restricted to one region of the United Kingdom and include a comparatively short follow up period. The hospitals were representative of the services generally available for self poisoning,¹ however, and most patients who poison themselves repeat the act soon after the

Risk of repetition of self poisoning in 604 patients presenting to six general hospitals in north west England

Variable	No of patients	No (%) who repeated self poisoning	Odds ratio (95% CI) for risk of repetition
Patients' characteristics			
Female	330	52 (16)	0.8 (0.5 to 1.3)
Previous episode of self poisoning	213	41 (19)	1.7 (1.1 to 2.8)
Dependent on drugs or alcohol	111	13 (12)	0.7 (0.4 to 1.4)
Index episode of high potential lethality	145	18 (12)	0.8 (0.5 to 1.4)
Psychiatric contact at time of index episode	112	19 (17)	1.3 (0.7 to 2.2)
Management of index episode			
Self discharged before assessment made	91	13 (14)	1.0 (0.5 to 1.8)
Did not receive psychosocial assessment	358	64 (18)	2.1 (1.2 to 3.3)
Admitted to medical ward	208	30 (14)	1.0 (0.6 to 1.6)
Admitted to psychiatric ward	14	3 (21)	1.6 (0.4 to 6.0)
Offered psychiatric follow up	117	18 (15)	1.1 (0.6 to 2.0)

index episode.⁴ We did not identify repeat episodes in patients who did not present to hospital, and this is a potential source of bias.

Psychosocial assessments have a number of elements.³ Further research should identify and refine the components of psychosocial assessments that reduce the risk of repetition of self poisoning.

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Contributors: NK and AH devised the study and wrote the initial draft of the paper. FHC advised on aspects of study design. KD and CM collected data and helped with aspects of study design. All authors contributed to the analysis and presentation of data and commented on drafts of the paper. NK is the guarantor for this study.

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A busy year of reading for medical students?

A liberal education may be had at a very slight cost of time and money. Well filled though the day be with appointed tasks, to make the best possible use of your one or of your ten talents, rest not satisfied with this professional training, but try to get the education, if not of a scholar, at least of a gentleman. Before going to sleep read for half an hour, and in the morning have a book open on your dressing table. You will be surprised to find how much can be accomplished in the course of a year. I have put down a list of ten books which you may make close friends. There are many others; studied carefully in your student days these will help in the inner education of which I speak.

- I. Old and New Testament.
 - II. Shakespeare.
 - III. Montaigne.
 - IV. Plutarch's *Lives*.
 - V. Marcus Aurelius.
 - VI. Epictetus.
 - VII. *Religio Medici*.
 - VIII. *Don Quixote*.
 - IX. Emerson
 - X. Oliver Wendell Holmes—Breakfast-Table Series.
- Sir William Osler *Aequanimitas* 1906