

eSTEP: a web-based learning resource for basic surgical trainees

Amit Amin, Furrat Amen

A website has been set up by the Royal College of Surgeons of England for trainees registered on the Surgeons in Training Education Programme (STEP). eSTEP has been designed to provide an interactive component to the course and looks to have added a new dimension to basic surgical training.

All basic surgical trainees (BSTs) have a common goal – to pass the Membership of the Royal College of Surgeons (MRCS) examination at the end of their basic surgical training. The Surgeons in Training Education Programme (STEP) is a distance learning package specifically designed to help trainees achieve this goal. This article reviews a new resource called ‘eSTEP’ (www.rcseng.ac.uk), a web-based initiative from the Royal College of Surgeons of England, and aims to raise awareness of this resource among BSTs.

THE BEGINNINGS

eSTEP was launched as a prototype site in February 2001 open to the 230 BSTs registered with the new STEP. An initial uptake of about 40–50 trainees entered a pilot period, which aimed to assess the usability of the site and to provide feedback for future development. The concept of online learning will be new territory to most BSTs and trainers alike, and the pilot period provided an invaluable opportunity to develop a site which would be both user-friendly and educational.

The experience and expertise behind eSTEP is provided by the ‘eFaculty’, a group of consultants and experts who have donated their time and effort to ensure the successful running of the site. eSTEP was launched to all STEP registered trainees in August 2001 and is currently undergoing further expansion and development.

Dr Amit Amin is Senior House Officer in Orthopaedics and Basic Surgical Trainee and **Dr Furrat Amen** is Senior House Officer in General Surgery and Basic Surgical Trainee, Princess Alexandra Hospital, Harlow CM20 1QX

FEATURES OF ESTEP

A specific login is provided to all eligible trainees, and access is gained through a personal password.

The site is based around the 12 STEP modules and in general allows trainees to share experiences, become involved in online discussion and have access to a wide variety of resources, including online journals and surgically relevant web links. Information relating to College issues and BST courses is also provided.

CASE OF THE WEEK

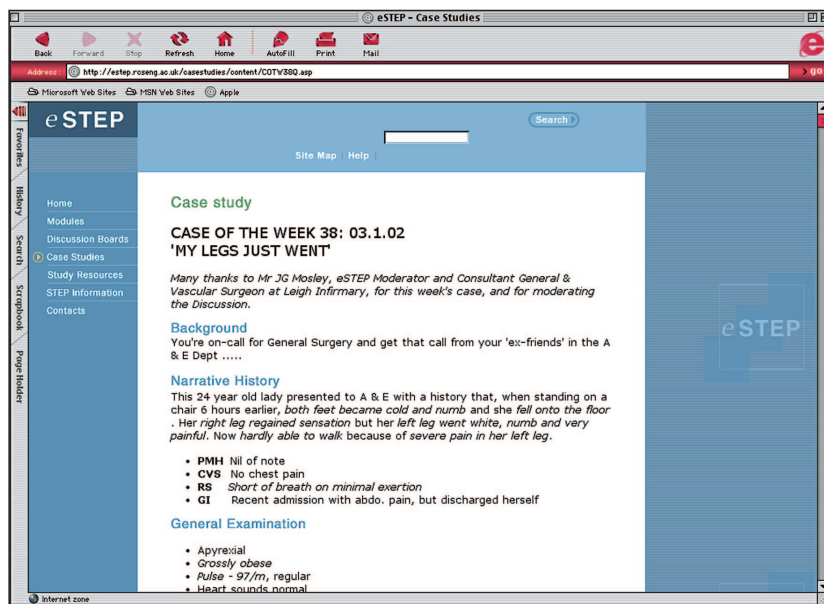
By far the most appealing resource provided by eSTEP appears thus far to be the case of the week (*Figure 1*). A genuine new case is presented each week by a different consultant, which can range in content from a very common to an extremely rare presentation, but with the common objective of stimulating online discussion. The case

is accompanied by a questions section relating to further management, including space to comment on any imaging provided. This section is linked to a discussion board where trainees can post their questions and answers. The discussion is overseen predominantly by the presenting consultant with the help of other moderators, and the answer to the case is explained in detail at the end of the week.

QUICK QUIZ

An equally popular section, which is also provided weekly, tests the knowledge of the trainee with three short questions relating to, for example, imaging, histology slides and surgical instruments. This is similarly linked to the discussion board where the trainee can submit queries and moderators can provide further questions.

Figure 1. Case of the week on the eSTEP site.



Correspondence to: Dr A Amin

DISCUSSION BOARDS

In addition to the case of the week and quick quiz sections, there are sections relating to the new STEP modules. This provides the trainee with the opportunity to ask questions relating to their study and clinical practice, with rapid responses from the consultant moderators. A moderator oversees each section on the discussion board.

Trainees have also started to communicate and discuss clinical scenarios and ethical issues among themselves on the discussion boards, sharing information and pointing out websites that might be helpful in the run up to examinations or may help in finding software for an electronic logbook. In this way, the College has managed to foster and encourage a sense of community online. This interaction is not limited to the Internet, however, as more and more trainees from the authors' hospital register and view the material, this allows for discussion about the cases at work. This in itself provides an important avenue for the College to influence practice to encompass the latest surgical developments in order to improve patient care.

The discussion boards are well suited to the busy and disparate nature of the work of trainees in the NHS. It is possible to access the discussion board and participate 24 hours a day, 7 days a week, and with Internet connections becoming more widespread in the hospital environment, it is possible to log on during a lull in the working day.

In the past, surgical trainees had to enrol onto correspondence courses, submit their work and wait for weeks while it was marked. This free resource has revolutionized surgical teaching. It allows for very interesting discussions to be held between consultants and trainees wherever they are in the world. One consultant even led a discussion while moored on a boat in an estuary.

FUTURE DEVELOPMENTS

To help trainees prepare for part 1 of the MRCS examination, the site is developing multiple choice questions and extended matching questions. Undoubtedly, this will be a popular

resource appealing to all trainees. An image bank and the use of streamed video are upcoming additions to the wide selection of resources on the site.

With the advent of high-speed mobile internet connections it is possible to envisage that the discussion board will allow for face-to-face video contact and live interaction to be conducted from the palm of the hand. One day, it may be possible to draw upon the collective experiences of other trainees and moderators when faced with a difficult case in casualty or clinic.

PERSONAL VIEW

As BSTs commencing the second year of training, both authors have enjoyed using the site over the last year. The opportunity to complement training conveniently at home, at work and on the move with a laptop computer or personal digital assistant has reaped rewards for both authors. Certainly, it has helped them pass the part 1 MRCS examination at the first sitting.

Having experienced the developments from the beginning, the authors feel that they are in a position to promote the site to all eligible trainees. There are now many trainees who are registered, but despite this, only a small minority have thus far contributed regularly to the discussions. Analysis by the eFaculty team has shown that there are many trainees who read but do not contribute to the discussions (referred to as 'lurkers'). Although this essentially works against

the philosophy of eSTEP, there are still benefits for these people in seeing problems worked through in dialogue.

The negative comments made about eSTEP, in particular about the case of the week, warrant a mention. Some trainees have expressed concerns about fellow colleagues dominating the weekly discussion by posting lengthy and detailed responses, which they feel reduces their contributions. The authors feel that the purpose of the discussions is not only to provide answers but also to ask questions relating to the case of the week, which are equally important if the trainee is to fully understand the case and its related management. Users have been constantly reminded by the eFaculty that they should not expect to pass the clinical and viva sections of the exam merely through bookwork. Discussion of cases, whether at work among colleagues or online with eSTEP, is essential to produce a trainee who can work through a clinical scenario with careful thought and planning.

CONCLUSION

Already a successful resource available to BSTs, the benefits of eSTEP are vast. As products of a successful and continuing project launched by the Royal College of Surgeons of England, the authors would recommend that every eligible trainee registers and becomes involved with eSTEP online. **HM**

Conflict of interest: none

KEY POINTS

- eSTEP is available to all basic surgical trainees registered with the new Surgeons in Training Education Programme (STEP).
- eSTEP is not a substitute for the STEP but a complementary resource, aimed at expanding surgical teaching.
- It is easily accessible and available 24 hours a day, 7 days a week.
- Contributions from trainees are essential to stimulate discussion.
- Consultants and experts oversee all aspects of the site, and questions that are posted are dealt with promptly.
- Feedback thus far is promising, and further development is currently being undertaken.
- Time will tell how much impact the site has on helping trainees pass the clinical and viva sections of the Membership of the Royal College of Surgeons examination. Experience thus far suggests that it may be a major stimulus for exam success.