# PRIMARY SURVEY

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### SCIENCE AND SNAKE BITES

Most UK based Emergency Physicians have little experience of managing snake bites. Those who do have usually only come across European Adder bites - which are rarely fatal. In contrast, snake envenomation is a major public health problem in the rural tropics and there is a need for good science surrounding epidemiology and treatment. Agarwal et al have written a Short Report on research related to severe neurotoxic snake envenomation. Read this article and critically appraise it before reading the following commentary by Isbister. After that, look up TOXBASE® and refresh your memory about emergency treatment following a bite from an unknown snake.

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### PARACETAMOL AND SALICYLATE LEVELS

We already know that routine measurement of plasma paracetamol levels in patients presenting with a reduced level of consciousness but no clear history of poisoning is clinically justified. But what about routine salicylate levels? Unlike paracetamol, there are specific early clinical features of salicylate poisoning and treatment is not guided by levels alone. A retrospective case note study from St Thomas' asks this question and reassures us that the answers are supported by the Association of Clinical Biochemists.

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### CONTROLLING ATRIAL FIBRILLATION

Deciding whether to aim for rate control or sinus rhythm in patients who

present with fast atrial fibrillation remains a common question for Emergency Physicians. Rapid rate control can be achieved with a beta-blocker or a calcium channel blocker. A randomised controlled trial based in an Emergency Department compares diltiazem with metoprolol. When reviewing these results, remember that rate control in AF is currently an unlicensed indication for intravenous diltiazem.

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# WHAT IS THE CORRECT SIZE FOR A NASOPHARYNGEAL AIRWAY?

Those who teach on life support courses will be familiar with this question—and the many answers! Some teach width based methods to estimate size whilst others teach length based methods. It seems that the latter group are closer to the truth. For optimal positioning, the tip of the NPA should lie approximately 10 mm above the epiglottis. This month's Review looks at the use of this simple but critical piece of equipment and dispels some myths. Perhaps the only question remaining is why we persist in using NPAs with a flange so small that we have to stick a safety pin through it!

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#### IS A CHEST PAIN OBSERVATION UNIT LIKELY TO BE COST-EFFECTIVE AT MY HOSPITAL?

A key element of critical appraisal is to question whether the results of valid research are likely to be applicable to your clinical setting. The ESCAPE study (effectiveness and safety of chest pain assessment to prevent emergency admissions) published last year showed that in one hospital, the use of a chest pain observation unit (CPOU) reduced the proportion of patients admitted, reduced the proportion of inappropriate discharges, was associated with improved health and resulted in a cost saving of £78 per patient. Goodacre  $\it et al$  have now developed a nomogram to estimate the cost-effectiveness of a CPOU for different rates of admission and different direct CPOU costs.

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# PREHOSPITAL THROMBOLYSIS – HAS ANYONE ASKED THE PARAMEDICS ?

Many Emergency Physicians remember the challenges associated with the introduction of thrombolysis in the Emergency Department. Thrombolysis is now considered to be within the scope of practice of NHS paramedics and it is being undertaken across the UK. Effective change management involves seeking the views of all stakeholders - the views of paramedics within one Ambulance Service who are expected to administer thrombolysis are published in a questionnaire study by Walker *et al.* 

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