

Abstract G83 Table 2 Sensitivity and specificity rates

Sensitivity	98.4%
Specificity	98.9%
Positive PV	97.2%
Negative PV	99.4%

Conclusion Neonatal echocardiography by neonatologists have high concordance rates and have a high sensitivity and specificity in detecting congenital heart diseases. With appropriate Paediatric Cardiology support Neonatal Echocardiography by neonatologists can be a safe and reliable tool.

G84 A PARENTS VIEW OF CARDIAC SCREENING FOR DOWN SYNDROME

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Background Cardiac disorders are common in children with Down syndrome and the Down Syndrome Medical Interest Group (DSMIG) guidelines were updated in 2007. This project aims to review if parents thought these standards were being met.

Methods A survey reflecting the guidelines was posted by the Down Syndrome Heart Group on their webpage and on facebook. Parent responders shared the page in order to more replies. The questionnaire was intended to identify when the diagnosis of Down Syndrome was made, and the time it took for a cardiologist referral and echocardiogram.

Results 98 responses were collected and analysed. 85 responders lived in England (86.7%). 23.65% were diagnosed with Down syndrome prenatally, 70.25% were diagnosed within one week of birth and 6.1% more than one week after birth. 94.45% underwent foetal echocardiography of which 54.1% had the diagnosis confirmed after birth and 94.5% were seen by a paediatric cardiologist within 2 weeks after birth. Of those who did not undergo foetal echocardiography, 71.4% were seen within 6 weeks of birth, in whom 42.9% were found to have congenital heart disease. 73.4% of those diagnosed with Down syndrome within one week of age had an ECG at this time. Only 84% of those with abnormal ECG were referred and seen by a paediatric cardiologist before 2 weeks of age. 14.2% were not seen by a cardiologist or underwent ECG within 6 weeks.

Conclusions The results of this parent led questionnaire show the majority of babies with Down syndrome are diagnosed within one week of birth. Most of the 2007 guidelines set by the DSMIG are being broadly met, however more emphasis should be made on meeting the deadlines for paediatric cardiology review and echocardiogram. This applies to whether diagnosis is made prenatally, within one week of birth or more than one week after birth. In addition only 73% of those that are diagnosed within a week undergo an immediate ECG. More importance needs to be based on adhering to the guidelines and reducing parental uncertainty about congenital heart disease in Down syndrome.

British Paediatric Allergy, Immunology and Infection Group**G85 ADRENALINE USE IN ANAPHYLAXIS IN PAEDIATRIC WARDS IN UK**

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Background Resuscitation Council Guidelines (RC-UK, 2008) for treating anaphylaxis advocate intramuscular adrenaline in doses of 150, 300 or 500 micrograms, according to age bands [1]. However, ALS guidelines recommend weight-based calculations of 10 micrograms/kg IM, leading to administration of a range of volumes [2].

Aims A survey was conducted to evaluate the availability of fixed dose Epipens versus adrenaline vials in paediatric wards and radiology departments in England.

Methods The questionnaire was sent to 105 paediatric pharmacists at the various paediatric units in UK.

Results 60% responding hospitals had adrenaline available, half of them in vials and 85% with prefilled variable-dose syringes. In 53% units, wards stocked adrenaline 1:10,000 and 64% also had 1:1000. 19% hospitals stocked Epipens on crash trolleys and it was available in 48% wards. Adrenaline was given according to a weight-based dose in 57% wards. For contrast studies, adrenaline was available in 68% departments, 9.5% of which stocked Epipen.

Conclusion Most units still use weight-based doses of adrenaline from vials or pre-filled syringes, with Epipens being available in less than half of units. Adrenaline must always be available on wards and in radiology departments, as most arrests from anaphylaxis occur within 10 minutes. To ensure compliance with RC-UK guidelines, either all wards should stock Epipens or the guidelines should reflect practise and recommend weight-based calculated doses.

REFERENCES

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G86 ANAPEN, EPIPEN AND JEXT AUTO-INJECTORS; ASSESSMENT OF SUCCESSFUL USE AFTER CURRENT TRAINING PACKAGE

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Background Anaphylaxis is a severe life threatening allergic reaction. Prompt administration of epinephrine(adrenaline) is the first line treatment. There are currently three epinephrine auto-injector devices available in the UK; original Anapen, new EpiPen and Jext, each of which differ in their advised method of use. International standards recommend training for all patients prescribed epinephrine auto-injectors, we meet these. If families can more successfully use a particular trainer device, this may have important clinical effects.

Aims To assess the effectiveness of the training by evaluating “epinephrine naive” families’ ability to successfully use an auto-injector trainer device.

Methods Adults and children over 12, with no experience of auto-injector use were invited to participate in this service evaluation. They were randomly allocated to be trained in the use of one of the available auto-injectors. Their performance was assessed using a ten point marking sheet based on the correct method of administration of epinephrine for the individual device. Six marks were for procedures identical to all three devices (e.g. massage the site of injection) and four were device specific to reflect the differences in administration technique. Success rates were analysed by Chi-square with $p < 0.05$ being deemed significant (<http://graphpad.com/quickcalcs/contingency2>).

Results There were 120 participants.