



Medical

Echo

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**Expand
your mind,
Change
your world**

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Editorial

May, 2012

Dear Doctor,

Best Wishes and Greetings for "**Noboborsho 1419**". Recently we have celebrated the Bengali New Year, which is truly the heart of any Bengali Festival and a precious occasion for all of us. Traditional boishakhi feasts and all deshi dessert are the main elements of this joyous noboborsho moments.

We would like to convey our heartiest thanks for appreciating and reading our earlier issue of "**Medical Echo**" focused on grand celebration of "**International Doctors' Day**". It is again an absolute pleasure to inform you that Apex Pharma has launched the 7th issue of periodical medical magazine to share the updated news of medical science and technology.

In this issue, the cover story is based on "**Day Awareness**". Globally a day is dedicated for the awareness of specific disease among the doctors, patients and general people. Hence, our focus is on the awareness campaign of "**World Asthma Day**" & "**World Hypertension Day**" of 2012.

The section "**Medical Case Echo**" is about "**A man with Hypertension & two murmurs**", which had been published on the British Medical Journal.

We have shared some astonishing "**medical miracles**" related news in the section of "**Medical Tit-Bits**".

The "**Clinical Echo**" section contains the latest Medical Breakthrough on "**Low bad Cholesterol tied to Cancer risk**" and "**Listening to music makes surgery less stressful**".

Finally in the section of "**Corporate Echo**" we have taken the pleasure to share some of our thoughts which include Objective and Visions of Apex Pharma this year.

Thank you for your support and being with us, wish you happy reading.

Sincerely yours

(Dr. Mohammed Arman Ullah)
Head of Marketing
Apex Pharma Limited

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World Asthma Day

01 May, 2012

Introduction: World Asthma Day is a yearly occasion structured by the Global Initiative for Asthma (GINA) to perk up the asthma alertness and concern around the globe. World Asthma Day takes place on the first Tuesday of May. The Global Initiative for Asthma (GINA) toils with health care professionals and civic health officials around the world to decrease asthma incidence, morbidity, and deaths. Through possessions such as proof bases course of action for asthma administration and proceedings for example the yearly celebration of World Asthma Day, GINA is operational to progress the lives of people with asthma in each and every part of the globe.



Why: The main purpose is to generate knowledge of the disease, its appropriate care, defensive methods amid the general public, health care providers, employees as well as government officials. There are an enormous number of people who go through from asthma and its abrupt attacks. So to put off these deadly attacks and to diminish the soreness and miseries of the asthma patients as well as their relative members by making available the most excellent accessible medical help is the main objective of the world asthma day. The association with the current study and expansion in medical amenities and therapeutic aids for the illness is the plan of the coordinators. There are an array of free health check up study and encampments planned for the patients, by the chief laboratories on the World Asthma Day. Still, some of the chief purposes which are commonly considered for the agenda of the day is as follows.

History: The first World Asthma Day, in 1998, was observed in more than 35 countries in union with the first World Asthma Meeting held in Barcelona, Spain. Partaking has been greater than before with every World Asthma Day held ever since then, and the day has turned out to be one of the world's most significant asthma wakefulness and educational events.



Theme

2012- You Can Control Your Asthma

2008- 2011- You Can Control Your Asthma



How to Control Your Asthma

4 Simple steps can help you achieve and maintain asthma control.

Take your asthma medications the way your doctor says to take them.

1



Most people with asthma needs two kind of medication:

- A quick-acting reliever or "rescue" medication that you take when needed to stop asthma symptoms.
- A controller medication that you take every day to prevent asthma symptoms.

Know the causes of your asthma symptoms and how to respond to them.

2



Each person with asthma reacts to a different set of risk factors.

- Take steps to avoid causes of asthma symptoms such as animals with fur, dust, strong smells and sprays, pollen from trees and flowers, and cigarette and fireplace smoke.
- Your doctor may tell you to take medication before exercising or working hard, if these activities cause asthma symptoms for you.

Work with your doctor to control your asthma.

3



Your doctor is your partner in achieving and maintaining asthma control.

- Go to the doctor 2 or 3 times a year for check-up, even if you feel fine and have no breathing problems.
- Ask questions.
- Make sure you understand how and when to take your medications.

Act quickly to treat asthma attacks.

4



- Know the signs your asthma is getting worse, how to react, and when to seek medical help.
- After an asthma attack, review your medication plan with your doctor and plan how to prevent future attacks.





Management of Bronchial Asthma

ASTHMA

Asthma is characterised by chronic airway inflammation and increased airway hyper-responsiveness leading to symptoms of wheeze, cough, chest tightness and dyspnoea. It is characterised functionally by the presence of airflow obstruction, which is variable over short periods of time, or is reversible with treatment.

EPIDEMIOLOGY

The prevalence of asthma increased steadily over the latter part of the last century in countries with a Western lifestyle and is also increasing in developing countries. Current estimates suggest that 300 million people world-wide suffer from asthma and an additional 100 million may be diagnosed with asthma by 2025. In childhood, asthma is more common in boys, but following puberty females are more frequently affected. The socio-economic impact of asthma is enormous, particularly when poor control leads to days lost from school or work, hospital admissions for some patients and a premature death.

MANAGEMENT

In the majority of patients with asthma, the disease can be effectively managed in primary care by partnerships between doctors, nurses and most importantly, patients themselves. The goals of asthma therapy have been endorsed by several sets of guidelines. Management may be directed towards achieving these goals by following a stepwise approach.

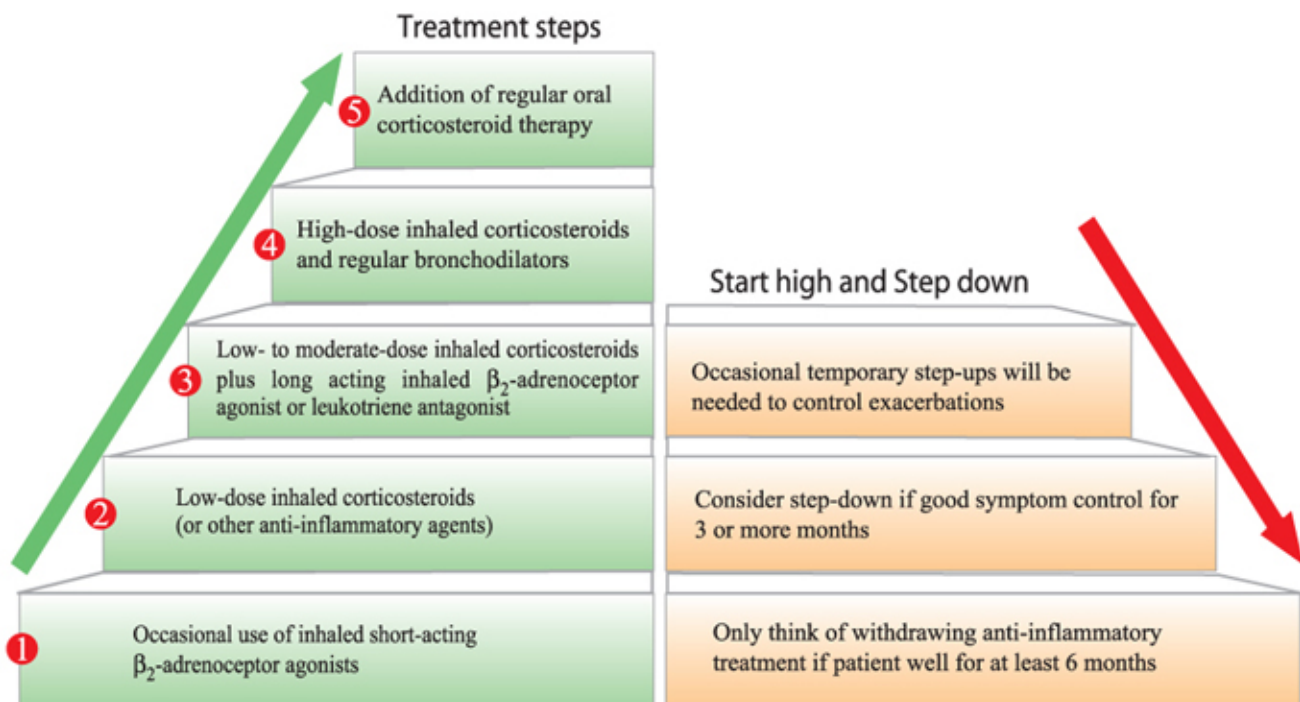


Figure. Concept of step-up and step-down drug treatment in asthma.



Myths & Facts *of Asthma*

Myth: Asthma is a creation of the mind.

Fact: No. It is a real disease and definitely not a psychological or emotional creation. It affects the airways and lungs, not the mind. It is a wrong belief that emotional persons have asthma as this disease is not caused by any upheaval of emotions. Emotions such as crying and stress only aggravate this condition.



Myth: All asthma patients show the same symptoms.

Fact: This is not true. Asthma symptoms differ from person to person and vary in intensity and frequency even within the same individual. Some patients may experience several symptoms such as coughing, wheezing and shortness of breath while others may simply cough.

Myth: Asthma symptoms in children often seem to go with age.

Fact: This is a life-long disease. As children grow, their airways also expand. This may lead to a reduction in symptoms. But it is possible that the symptoms may return and lead to attacks.



Myth: Exposure to pets can help decrease asthma attacks.

Fact: No. Exposure to pets will not decrease your attacks. Actually, the protein found in the saliva and urine of pets is responsible for this illness in some people. As most dogs have saliva, dander and urine, it is incorrect to believe that some breeds of dogs can reduce the symptoms of this disease. In fact, if you are allergic to animals, you should avoid keeping pets in the house.

Myth: Taking asthma medicines for a long period can make them ineffective.

Fact: No. Asthma is a chronic disease and patients need to take medicines for a considerable period or according to symptoms



Montelon-10

Montelukast 10 mg Tablet

Makes breathing easy in asthma



Better choice for the control of asthma & allergic rhinitis



Better patient compliance



Reduces the concurrent use of other allergic rhinitis medication



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World Hypertension Day

17 May, 2012

Introduction:

Every year, 17th May is dedicated to World Hypertension Day (WHD). This is an initiative of the World Hypertension League (WHL), an affiliated section of the ISH. Hypertension is most commonly known as High Blood Pressure. It is a chronic medical condition in which the blood pressure is elevated. Many people have high blood pressure for years without knowing it. Most of the time, there are no symptoms, but when high blood pressure goes untreated, it damages arteries and vital organs throughout the body. That's why high blood pressure is often called the 'silent killer'.



Why: World Hypertension League (WHL) intends to raise awareness not only of hypertension, but also of factors contributing to an increase in the incidence of hypertension and on ways to prevent it. Recent reports confirm the ease, accuracy and safety of blood pressure measurements using home monitors.

History: The WHD was first inaugurated in May 2005 and has become an annual event ever since. The purpose of the WHD is to promote public awareness of hypertension and to encourage citizens of all countries to prevent and control this silent killer, the modern epidemic.



Theme

2012: Healthy Lifestyle - Healthy Blood Pressure.

2011: Know Your Numbers Target Your Blood Pressure

2010: Healthy weight - Healthy Blood Pressure

2009: Salt and High Blood Pressure: Two silent killers

2008: Measure your blood pressure.....at home





**Healthy Lifestyle
Healthy Blood Pressure**



**WORLD
HYPERTENSION
DAY** *Initiated by the
world Hypertension league*

17th May, 2012

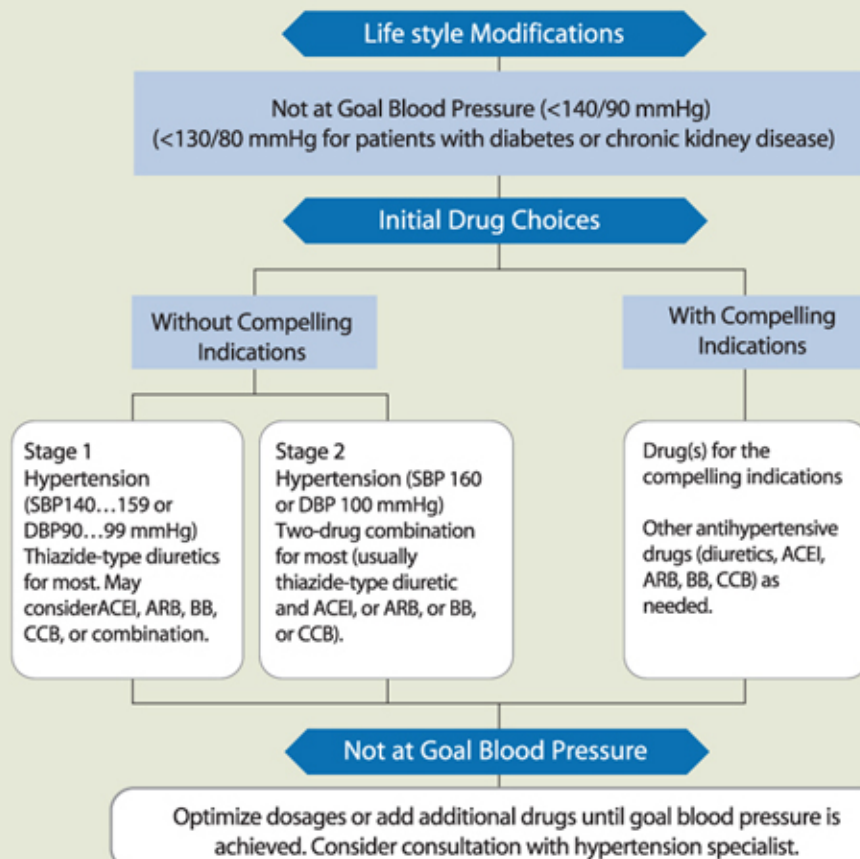


Hypertension Management

Achieving Blood Pressure Control in Individual Patients

Most patients who are hypertensive will require two or more antihypertensive medications to achieve their BP goals. Addition of a second drug from a different class should be initiated when use of a single drug in adequate doses fails to achieve the BP goal. When BP is more than 20/10mmHg above goal, consideration should be given to initiating therapy with two drugs, either as separate prescriptions or in fixed-dose combinations. The initiation of drug therapy with more than one agent may increase the likelihood of achieving the BP goal in a more timely fashion, but particular caution is advised in those at risk for orthostatic hypotension, such as patients with diabetes, autonomic dysfunction, and some older persons. Use of generic drugs or combination drugs should be considered to reduce prescription costs.

Algorithm for treatment of hypertension



DBP, diastolic blood pressure; SBP, systolic blood pressure. Drug abbreviations: ACEI, angiotensin converting enzyme inhibitor; ARB, angiotensin receptor blocker; BB, beta-blocker; CCB, calcium channel blocker.

Ref: JNC 7





Once antihypertensive drug therapy is initiated, most patients should return for followup and adjustment of medications at approximately monthly intervals until the BP goal is reached. More frequent visits will be necessary for patients with stage 2 hypertension or with complicating comorbid conditions. Serum potassium and creatinine should be monitored at least 1–2 times/year. After BP is at goal and stable, followup visits can usually be at 3- to 6-month intervals. Comorbidities, such as heart failure, associated diseases such as diabetes and the need for laboratory tests influence the frequency of visits. Other cardiovascular risk factors should be treated to their respective goals, and tobacco avoidance should be promoted vigorously. Low-dose aspirin therapy should be considered only when BP is controlled, because the risk of hemorrhagic stroke is increased in patients with uncontrolled hypertension.

Clinical trial and guideline basis for compelling indications for individual drug classes

Recommended Drugs**						
Compelling Indication*	Diuretic	BB	ACEI	ARB	CCB	Aldo ANT
Heart failure	●	●	●	●		●
Postmyocardial infarction		●	●			●
High coronary disease risk	●	●	●		●	
Diabetes	●	●	●	●	●	
Chronic kidney disease			●	●		
Recurrent stroke prevention	●		●			

*Compelling indications for antihypertensive drugs are based on benefits from outcome studies or existing clinical guidelines; the compelling indication is managed in parallel with the BP.

**Drug abbreviations: ACEI, angiotensin converting enzyme inhibitor; ARB, angiotensin receptor blocker; Aldo ANT, aldosterone antagonist; BB, beta-blocker; CCB, calcium channel blocker.

Cardiovascular risk factors

Major Risk Factors

- Hypertension
- Cigarette smoking
- Obesity
- Physical inactivity
- Dyslipidemia
- Diabetes mellitus
- Microalbuminuria or estimated GFR <60 mL/min
- Age (older than 55 for men, 65 for women)
- Family history of premature cardiovascular disease (men under age 55 or women under age 65)

Target Organ Damage

- Heart
 - Left ventricular hypertrophy
 - Angina or prior myocardial infarction
 - Prior coronary revascularization
 - Heart failure
- Brain
 - Stroke or transient ischemic attack
 - Peripheral arterial disease
 - Retinopathy

Angical-50

Amlodipine 5 mg + Atenolol 50 mg film coated bi-layer Tablet

Most widely used combination antihypertensive

in
bi-layer
tablet form



Greater advantages of bi-layer formulation over conventional formulation

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- Maintains Physical & Chemical stability
- Retains Potency & ensures Dose Accuracy

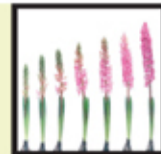
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Myths & Facts *of Hypertension*

Myth : If you don't have hypertension even after the age of 55, it means you are fine.

Fact: Don't take this, not for your life! Hypertension can develop at any stage of your life. So, do not think that you are safe from the risk of hypertension. Continue with the precautions necessary to prevent the development of hypertension.

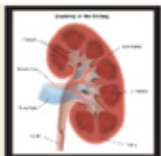


Myth: Hypertension is curable.

Fact: Hypertension can be controlled. It can't get totally cured.

Myth: Taking BP medications regularly is not important & exercise or walking is only enough

Fact: Take your BP medications regularly. Exercise & walking is essential to keep weight in control.



Myth: Kidney function tests are not necessary.

Fact: Every hypertension case should undergo kidney investigations. This is especially true in case of young patients as hypertension can occur secondary to kidney disease. In known hypertensives, disease can affect kidneys.

Myth: Excess table salt intake does not cause hypertension.

Fact: Excess salt intake can lead to water retention in body and increased blood pressure. This is more likely to happen in a known patient of hypertension.






Losarpe^x

Losartan Potassium 25 mg & 50 mg Tablet

The brand of Losartan you can rely



-  **Controls moderate to severe Blood Pressure effectively**
-  **Provides 24-hour BP Control**
-  **The safest among all antihypertensives**

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Medical case Echo

A man with hypertension and two murmurs

British Medical Journal, January 2012

A 34 years old white man was referred by his general practitioner to our cardiology clinic with hypertension and a six month history of intermittent lower midsternal chest pain. The pain radiated to the left side of his back and was unrelated to physical exertion. He also reported two episodes of sudden onset dyspnoea, which lasted a few minutes, occurred at rest, and was not associated with chest pain or cardiac symptoms. He had not experienced such symptoms previously. His exercise tolerance was normal. On examination, he was comfortable at rest. His heart rate was regular, at 80 beats/min. He had a large volume "collapsing" pulse, a prominent carotid pulse, and bounding peripheral pulses. His jugular venous pressure was not raised. There was no radioradial delay but radiofemoral delay was noted. His blood pressure was 210/70 mm Hg. The apex beat was visible and displaced 3 cm left of the midclavicular line in the fifth intercostal space. A left parasternal heave was noted. On auscultation, a loud early diastolic murmur and a systolic murmur were heard. Examination of the respiratory, abdominal, and neurological systems was unremarkable.

Figure 1 shows his chest radiograph.



Fig 1 Posteroanterior chest radiograph

aorta; the widened pulse pressure, loud early diastolic murmur, and prominent carotid pulse suggest aortic valve regurgitation. The aortic valve is bicuspid, thus prone to regurgitation, in 20-85% of patients with coarctation.



Fig 2 Posteroanterior chest radiograph showing characteristic inferior rib notching (Roesler's sign, red arrows) owing to expansion of collateral vasculature in response to coarctation. Loss of the aortic knuckle (usual location indicated by red broken arc) and cardiomegaly are also seen

Long answer

The chest radiograph shows rib notching (Roesler's sign), cardiomegaly—a cardiothoracic ratio larger than 50% (52% as measured by standard (Danzer) method.¹), and loss of the aortic knuckle (fig 2).^{2 3} The blood pressure reading shows systolic hypertension and a wide pulse pressure. The rib notching, raised systolic blood pressure, and systolic murmur are consistent with coarctation of the aorta. The widened pulse pressure and loud early diastolic murmur are indicative of aortic regurgitation.

Coarctation typically presents with hypertension in the upper limbs (resulting in a high brachiofemoral blood pressure index) and weak delayed pulses in the legs (radiofemoral delay evident on examination). The site of coarctation is usually distal to the left subclavian artery and there is no radioradial delay; however, such a delay may occur if the coarctation occurs between the brachiocephalic artery and the left subclavian artery. Coarctation leads to the development of collateral arteries, which may be divided into long and short collateral pathways.

The long collateral pathways connect the anterior branches of the internal mammary arteries to the posterior intercostal arteries (which arise from the descending thoracic aorta). These tortuous and dilated collateral intercostal arteries erode the undersurfaces of the ribs and are responsible for the classic rib notching. In the short collateral pathways, blood reaches the descending aorta through the first and

Questions

1. On the basis of the clinical findings and chest radiograph, what diagnoses can be made?
2. What investigations might help you to confirm the suspected diagnoses?
3. What are the management options and long term prognoses?

1. On the basis of the clinical findings and chest radiograph, what diagnoses can be made

Short answer

Rib notching (fig 2), cardiomegaly, loss of aortic knuckle, systolic hypertension, and systolic murmur are consistent with coarctation of the



Medical case **Echo**

second posterior intercostal arteries and their anastomoses with the third and fourth intercostal arteries. This pathway does not travel the length of the ribs, so the upper ribs are usually spared from notching (fig 2).

The aortic valve is bicuspid in 20-85% of people with coarctation, and such valves are prone to aortic regurgitation.⁵⁻⁷ Other associated lesions include subvalvular, valvular, or supra-valvular aortic stenosis; mitral valve stenosis and parachute mitral valve (a complex known as Shone's syndrome); and complex congenital heart defects.⁵ The regurgitant flow causes a decrease in the diastolic blood pressure in the aorta and therefore an increase in the pressure difference between aortic systolic and diastolic blood pressures (pulse pressure). When it is associated with at least one other cardiac or aortic lesion (such as aortic valve disease, ventricular septal defect, mitral valve disease, or coronary artery disease), the coarctation is referred to as complex coarctation and prognosis greatly depends on associated intracardiac anomalies.⁸⁻¹⁰ Aortic regurgitation typically presents with a large volume "collapsing" pulse and bounding peripheral pulses (Watson's water hammer pulse). A plethora of other eponymous signs is also associated with the condition,¹¹ of which the most commonly recognised are Corrigan's pulse (rapid upstroke and collapse of the carotid artery pulse), Quincke's sign (pulsation of the capillary bed in the nail), de Musset's sign (head nodding in time with the heart beat), and Duroziez's sign (intermittent femoral artery murmur generated by femoral artery compression). Patients with aortic regurgitation would be expected to have an early diastolic murmur and, possibly, a displaced heaving apex beat (owing to left ventricular enlargement) and a fourth heart sound (S₄). Coarctation often produces a systolic murmur heard anteriorly over the coarctation or over the back, and a vascular bruit from collateral circulation may also be audible.

2 What investigations might help you to confirm the suspected diagnoses?

Short answer

Transthoracic echocardiography would enable diagnosis of aortic coarctation and aortic valve regurgitation. Computed tomography and cardiac magnetic resonance imaging are the investigations of choice for assessing coarctation; evaluation of the aortic valve and cardiac function may require transoesophageal echocardiography, especially if surgical intervention is planned.

Long answer

As for all patients with hypertension, it is important to assess for evidence of end organ damage (electrocardiography to look for cardiac changes; urine analysis for renal damage; ophthalmoscopic examination for retinal damage). In addition to these routine investigations, transthoracic echocardiography is a non-invasive test that is suitable for the diagnosis of aortic valve regurgitation, assessment of its severity, and measurement of cardiac function (for example, ejection fractions).⁵ In addition, Doppler flow scans measured from the suprasternal notch may permit visualisation and diagnosis of aortic coarctation.¹² In all but the mildest cases, further investigation is needed to direct appropriate medical and surgical treatment.

Transoesophageal echocardiography is sometimes necessary—for example, if transthoracic echocardiography does not adequately visualise valvular function or if surgical intervention is planned (figs 3 and 4). If available, computed tomography or cardiac magnetic resonance

imaging is best suited to assess the coarctation.

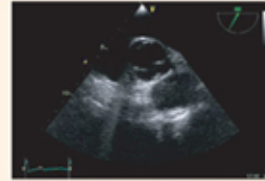


Fig 3 Transoesophageal echocardiogram showing bicuspid aortic valve in short axis view

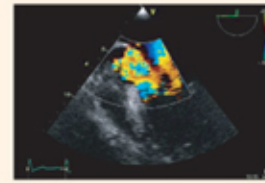


Fig 4 Transoesophageal echocardiogram with Doppler imaging showing retrograde flow indicative of aortic valve regurgitation

Patients with coarctation should be followed up at least every other year. Although computed tomography is cheap, widely available, and combines high levels of spatial resolution with rapid acquisition time, it exposes patients to high levels of radiation and may not be suitable for younger patients who require follow-up.⁵ In female patients, it is important to consider Turner's syndrome (45XO) because coarctation is seen in 10-17% of these patients.^{6 14} Other associations include Williams-Beuren syndrome, congenital rubella syndrome, neurofibromatosis, Takayasu's arteritis, and trauma.

3 What are the management options and long term prognoses?

Short answer

Aggressive medical management of hypertension is usually started before definitive treatment of aortic coarctation (usually endovascular stenting); even with definitive treatment, most patients remain hypertensive for life. Coexistence of aortic valve regurgitation and aortic coarctation usually warrants surgical replacement or repair of the aortic valve.

Long answer

Aggressive medical treatment of hypertension is usually started as soon as the diagnosis is made. The benefits of this are twofold—it reduces the risk of further vascular and end organ damage and lowers blood pressure in preparation for endovascular or surgical intervention. Even with definitive treatment of the coarctation, 25-75% of patients are still hypertensive 30 years after surgery,⁸ and long term antihypertensive treatment is usually needed.⁶ Patients are also at increased risk of cardiovascular complications (such as coronary artery disease, congestive cardiac failure, cerebral aneurysms, and stroke).

Definitive treatment of the coarctation can be endovascular or surgical. Endovascular options are balloon dilatation angioplasty or stent implantation.¹⁵ Surgical options include end to end resection and anastomosis, patch repair, tube grafts, and subclavian flap arterioplasty.⁶ Endovascular interventions have similar clinical outcomes to surgical management and are less invasive. Endovascular stenting has emerged as the mainstay intervention (figs 5 and 6), with better clinical outcomes and fewer complications than surgery.





Medical case Echo

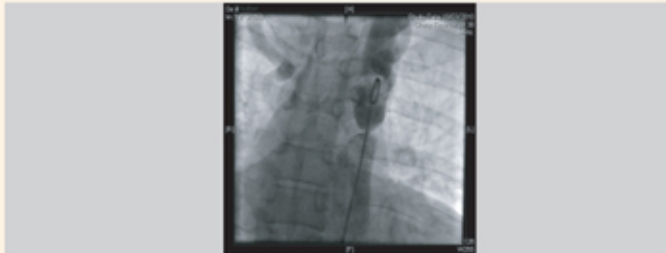


Fig 5 Anteroposterior angiogram of the descending aorta showing coarctation distal to the left subclavian artery

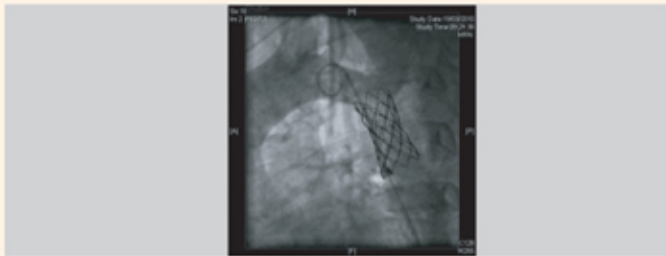


Fig 6 Lateroposterior angiogram of stented coarctation. The only definitive treatment for aortic valve regurgitation is surgical valve replacement or repair, although such interventions are not deemed necessary in all cases. However, the coexistence of aortic valve pathology and aortic coarctation usually warrants surgical treatment. A staged management approach is usually used in such cases, with stenting of the coarctation performed first.¹⁷ If aortic valve surgery is still needed, stenting lowers the risk associated with the operative bypass procedure. Although aortic coarctation is often seen as an isolated vascular defect, it should be considered as an element of a diffuse arteriopathy, and as such patients require appropriate long term follow-up.

Patient outcome

Our patient was admitted and started on an aggressive blood pressure lowering treatment of bendroflumethiazide 2.5 mg, atenolol 100 mg, and amlodipine 10 mg, as well as simvastatin 40 mg (all once daily). Once stabilised, he was discharged and later underwent endovascular stent insertion (figs 5 and 6). He is currently being assessed for aortic valve replacement. Competing interests: All authors have completed the ICMJE uniform disclosure form at www.icmje.org/coi_disclosure.pdf (available on request from the corresponding author) and declare: no support from any organisation for the submitted work; no financial relationships with any organisations that might have an interest in the submitted work in the previous three years; no other relationships or

activities that could appear to have influenced the submitted work. Provenance and peer review: Not commissioned; externally peer reviewed.

Patient consent obtained.

The first two authors contributed equally to this publication.

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Azinil Once Daily Antibiotic
Azithromycin

250 mg Tablet
500 mg Tablet
20 ml PFS
35 ml PFS



Medical miracles inspire a mix of awe and hope, as well as a good measure of shock and horror at circumstances other people have endured and survived. Some stories are shocking, some a gruesome and some are just plain miraculous. Here are just a few of some of the most amazing medical miracles recorded.



A First-Time Mother at 70

Rajo Devi and her husband Bala Ram were married for 50 years before Devi gave birth to their first child, at the age of 70. The couple, who had struggled with the social stigma of infertility for decades, finally conceived using in vitro fertilization and a technique called intra cytoplasmic sperm injection, which makes it easier to fertilize an egg with poor quality sperm. Dr. Bishnoi from the Hisar Fertility Centre Treated Devi, and states that special care was taken to prevent a multiple pregnancy, which could have had catastrophic results for both Devi and her baby. Both mom and baby are healthy, and Devi is currently the oldest woman known to have given birth to their first child.

Brain with Leaky Veins Fixed with Superglue

17-month-old Ella-Grace Honeyman was born with a rare malformation of the blood vessels in the brain called Vein of Galen Malformation. The malformation causes high pressures in the vein of Galen, resulting in aneurysms. In Ella-Grace, news reports state that the high pressure caused blood to leak into her brain and resulted in the formation of a potentially fatal aneurysm. The condition is so rare, that the toddler had to be taken first to France, and then to the United States for treatment. She underwent surgery that plugged the tiny holes in her blood vessels with a type of medical superglue. While she will still need more operations in the future, doctors say Ella-Grace will now be able to live a long and healthy life.





Man Survives Steel Bar Through Chest

Twenty-two-year-old Supratim Dutta defied all odds when he survived being impaled by a 5 foot long, two inch thick iron bar. Dutta was impaled when his driver lost control of the car he was riding in and smashed into a barricade. Miraculously, the iron bar missed all vital organs, and surgeons were able to remove it. Dutta was released from the hospital just two weeks later and made a full recovery.

Implanted Electrodes Wake Man After 6 Years

A serious assault left a man in a near-vegetative state for six years, until a medical team inserted electrodes into his brain with miraculous results. The man, who had previously been unable to swallow, communicate or make coordinated movements of any kind, was suddenly able to talk, feed himself and interact with his family. The man experienced almost immediate improvement when the electrodes were stimulated, and now they turn on and off every 12 hours to give him a normal sleep-wake cycle. The electrodes were used to stimulate the thalamus, an important region deep within the brain. This form of deep brain stimulation has been used to treat Parkinsons disease, but it had never been used before to treat a patient with this type of brain damage.



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Low Bad Cholesterol Tied to Cancer Risk

27 March 2012

US researchers suggest there is an underlying mechanism that affects both cancer and low LDL (so-called "bad") cholesterol, because they found low LDL cholesterol in people with no history of taking drugs to lower their cholesterol precedes cancer risk by decades.

Lead investigator Dr Paul Michael Lavigne, of Tufts Medical Center in Boston, presented the findings, which are based on new data from the Framingham Heart Study (FHS) offspring cohort, at the American College of Cardiology's 61st Annual Scientific Session in Chicago on Sunday.

The benefits of using cholesterol-lowering drugs to prevent heart disease are well established. However, studies of these drugs have suggested there could be a link between low levels of low-density lipoprotein cholesterol (LDL-C) and cancer risk. *Low Bad Cholesterol Tied To Cancer Risk*. For their matched case control study, Lavigne and colleagues compared 201 participants with cancer and 402 controls who were cancer free.

Cancer cases and controls were matched by age, gender, tobacco use, blood pressure, body mass index, diabetes, and other factors.

Neither the participants with cancer nor the controls had any history of taking cholesterol-lowering medication.

The researchers assessed the trend of low LDL-C for an extended period of time prior to cancer diagnosis, using data taken at four points over an average of 18.7 years prior to diagnosis.

The results showed that LDL cholesterol levels were lower in the participants with cancer than their matched controls at each of the data points.

Compared to cancer-free participants, the trend of low LDL-C in those who developed cancer was consistent throughout the period of study.




The results were the same when the researchers took into account levels of high-density lipoprotein (HDL, or "good") cholesterol.



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Listening to music 'makes surgery less stressful'

28 March 2012

Playing music to patients while they go under the knife reduces their anxiety and may even aid healing, surgeons say.

Easy listening tracks and chart hits can have a calming effect on patients who are awake for surgery under local anaesthetic, a team at the John Radcliffe Hospital in Oxford found.

Listening to the radio also helped.

Their small study, published in Annals of the Royal College of Surgeons, tracked the progress of 96 patients having minor surgery at the hospital.

Half of the patients were played music - broadcast by a radio station or from a selection of tunes on a CD chosen by the surgical staff - while the other half had their operation under the usual 'hushed' conditions.

After the surgery was completed the patients, some elective and some emergency cases, were asked to rate how anxious they had felt during the operation.

The group played music scored about a third less on anxiety levels and were also noted to have more relaxed breathing patterns during the surgery - an average of 11 breaths per minute compared to 13 breaths per minute in the non-music group.

This ties in with past studies have which have shown music may help ease pain and can help hospital patients on ventilators breathe more easily.

Experts know that stress can have a negative impact on surgical outcomes and prolong the healing process.

Hazim Sadideen, a plastic surgical registrar who led the study, said more work was now needed to establish whether the use of music in operating theatres should become standard practice.

"Undergoing surgery can be a stressful experience for patients and finding ways of making them more comfortable should be our goal as clinicians.

"There are also good medical reasons - calmer patients may cope better with pain and recover quicker."

Music might also lead to a happier, calmer surgeons and theatre staff, the researchers suggest.



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The **Annual Sales & Marketing Conference** of **Apex Pharma Limited** was held at the Bashundhara Convention centre. All associates including entire sales and marketing team, board of directors and corporate guests from Syed Manzur Elahi Enterprise attended the conference. Syed Manzur Elahi Chairman of **Apex Pharma** was the chief guest, Syed Nasim Manzur Director of Apex Pharma was the special guest of the programme. A.M. Faruque, Managing Director and CEO, Md. Quamrul Hassan, Chief Operating Officer and senior officials were also present.

Apex Pharma has made a number of accomplishments over the last year. Apex Pharma created history in the Bangladesh Pharma industry by introducing the first-ever team of professional graduate pharmacist as "**Medico Marketing Executives**" to create new dimension in pharmaceutical marketing. **Sanofi Aventis** and **Apex Pharma's** ground breaking agreement for marketing and distribution of selected Sanofi Brands combined the both companies' strengths to deliver high quality medicines to the maximum number of doctors, patients and chemists. **The clinical Alliance for Bioequivalence Study with ICDDR, B** was also achievement for us.



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Ref: European Journal of clinical pharmacology (2008) 64:935-951

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