

JOURNAL REVIEW

By: Dr. Sunil Kumar Sinha,(Prof) Anaesthesia, LHMC & Associated Hospitals

A. Camera Phone as the medium Lichtor JL. Anaesthesiology 2010:112:196

In terms of health care, camera phones have been used to help diagnose a seizure, and from afar both to help diagnose skin lesions and for radiologic studies in patients with acute neurological problems. They have become almost ubiquitous in some operating rooms.

Although such devices are very utilitarian, there are at least three issues to consider:-

1. Resolution of picture may not be adequate for publication.
2. Camera phones can serve as a risk for infection. In one study of mobile phone use in the operating room, bacterial contamination of physician hands because of mobile phones was found in 38 of 40 physicians, and 10% were infected with human pathogenic bacteria. Therefore, remember to wash your hands after you use the phone and then care for the patient.
3. Patients must be treated with privacy and dignity. Both informed consent and confidentiality are considered for any image that is published. Unless essential for scientific purposes, patient identifying information should not be published. Patient should see the figure for the manuscript before it is published.

B. Dapagliflozin, a novel, selective SGLT2 inhibitor, Improved Glycemic Control over 2 weeks in patients with Type 2 Diabetes Mellitus.

Komovoski B et al. Clinical Pharmacology and Therapeutics 85; 513-519(2009)

Background:

Type 2 Diabetes mellitus (T2DM) is a disorder characterized by elevated serum glucose. Hyperglycemia is well established as a major risk factor for microvascular and potentially macrovascular complications of diabetes. In addition, there is strong evidence to suggest that hyperglycemia per se has a deleterious effect on insulin secretion and reduces insulin sensitivity an effect referred to as **glucotoxicity** and this in turn contributes to the progression of diabetes. The majority of therapies that treat T2DM work on insulin signaling pathway or on insulin secretion itself and none lowers blood glucose through insulin-independent mechanism.

A novel approach to reducing serum glucose in T2DM patients is by **therapeutic inhibition of glucose reabsorption in the kidney**. The kidneys play an important role in the overall control of glucose, given that glucose is filtered through the glomeruli at the rate of ~8 gm/hour and almost completely reabsorbed in the proximal tubule via sodium-glucose cotransporters 2 (SGLT2). This SGLT2 mediated reabsorption of glucose is highly efficient with <0.5 gm of glucose being eliminated in the urine per day in healthy individuals.

Inhibition of SGLT2 is a rational insulin-independent therapeutic approach to the lowering blood glucose through renal glucose reabsorption, resulting in a mandatory increase in urinary glucose and loss of calories. Dapagliflozin inhibited upto 50% filtered glucose from being reabsorbed by the kidney, thereby leading to glucose excretion of ~60gm/day and upto 3 gm/hour.

Study: In this study Dapagliflozin was administered to patients in once daily oral dose. This 14-day study randomized patients with T2DM to four treatment groups receiving daily oral dose of 5-, 25-, 100 mg doses of Dapagliflozin or placebo in order to evaluate glucosuria and glycemic parameters. Significant reductions in fasting serum glucose (FSG) and also improvement in oral glucose tolerance test were seen in all doses used. Dapagliflozin produced dose dependent increase in glucosuria and clinically meaningful changes in glycemic parameters in T2DM

Prospects: This study convincingly proves beneficial effect of SGLT2 inhibitor Dapagliflozin. If the long term safety of the drugs is proven, the effect of this novel therapy have enormous use in intensive care units, peri-operative medicine and overall routine diabetic management.

Managers are people who do things right, Leaders are the people who do the right thing

CLUES

ACROSS

1. BT shunt used in management.
6. Antidote for overdose is Fab Antibody fragments.
7. Archie created, using his Brain.
9. South American poison.
10. GFR < 10 ml/min
11. One example is methylene blue
12. Circuit checked by Pethick test.
14. Depolarisation of the ventricle.
15. Usually reciprocal relationship with pH.
16. If it doesn't move, you move to 18 down.
19. Has seizure causing metabolite.

DOWN

2. Principle of pulse oximetry.
3. Used to treat refractory status epilepticus
4. Tea Three
5. Rotameter
8. Analgesic intrathecally, but not intravenously.
13. Containdicated in gastric ulcers & renal failure.
17. Cylinder with pin index position 1,5.
18. 'Big bag' of food.

FUMBLE NO. 3

EDIAHITZ

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TOXPLESHOMAH

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PYTTIRAI

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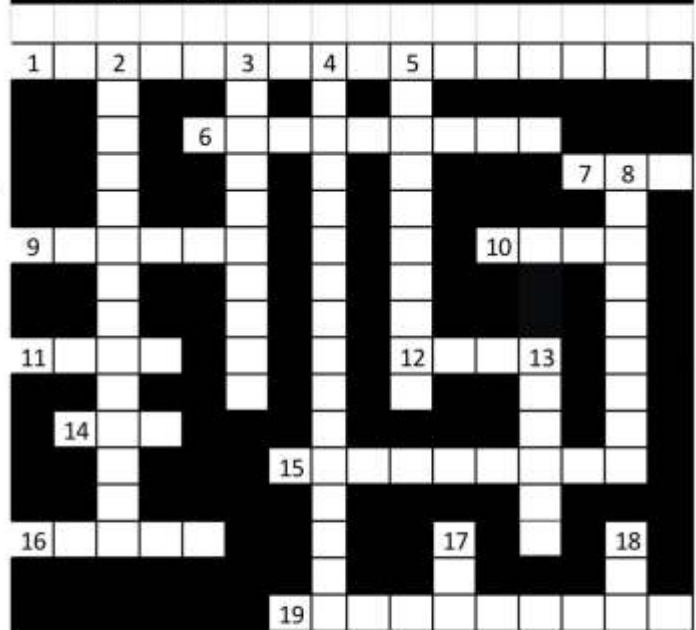
PAUUCENTRC

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Property Related to Viscosity of Blood

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CROSSWORD NO.3



CROSSWORD NO.2 - SOLUTION



FUMBLE NO. 2 SOLUTION

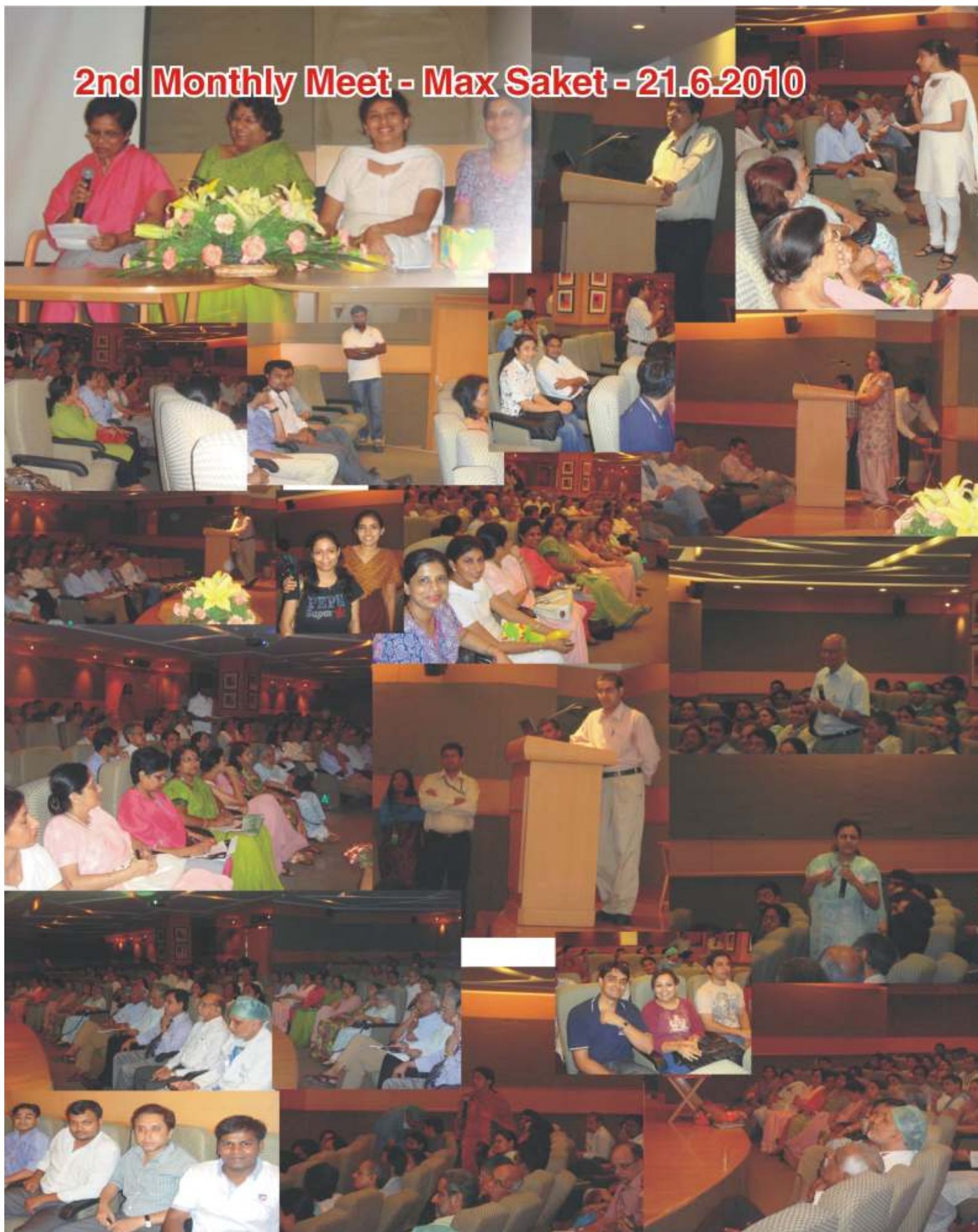
FENTANYL, PROCAINE, DOXAPRAM

Answer
AMIODARONE

Please send your answers by email to isadelhi2010@gmail.com
or by post to the Secretariat / Secretary,
Dr. (Prof.) Radhika Agarwala, (ISA Delhi Branch), Deptt. of Anaesthesiology, LHMC & SKSCH,
New Delhi-1 by June 30, 2010

Winners will be declared in the next monthly meet. Conditions winners must be ISA members.
Write your full name, ISA no, designation, place of work, mobile no, e-mail, address.
Kindly Register Yourself As ISA Members. All Executive Members To Compulsorily Become ISA Members.

2nd Monthly Meet - Max Saket - 21.6.2010



FORTHCOMING EVENTS

29th Nov-7th Dec 2010

Post graduate Assembly North India 2010 at Swarn Jayanti Auditorium,
Lady Hardinge Medical College, New Delhi

Registration fees: Rs 4000

Mode of payment: Cash/Chq/DD in favour of: "PG Assembly North India" payable at New Delhi

WORLD ANAESTHESIA DAY (16TH OCTOBER, 2010)

HIGHLIGHTS

CULTURAL PROGRAMMES

DUMB CHARADES

GUESS WHO?

Registration Charges : Rs. 300/- per person & Rs. 500/- per couple until 30th September, 2010
From 1st October, 2010 = Rs. 400/- per person & Rs. 700 per couple. NO SPOT REGISTRATION
It is requested that Hospitals interested in participation should contact at the earliest .

Dr Pramod Kohli 9811046848 or any Executive Member

2ND ANNUAL CONFERENCE OF INDIAN COLLEGE OF ANAESTHESIOLOGISTS (ICACON 2010)

Trends & Challenges in Anaesthesia on 20th and 21st November-2010

Organised by
Department of Anaesthesiology & Critical Care
Pt. B.D. Sharma
Post Graduate Institute of Medical Sciences,
Rohtak-124001 (HARYANA)

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1 As of June 2009

2 <http://www.fda.gov/bbs/topics/NEWS/2007/NEW01765.html>

3 Lehmann G et al. Drugs RD 8 (2007) 229-240