

Welcome!

We bring you the latest information to help you in your practice. This issue, we share a recording of our recent CME webinar on SGLT2 inhibitors and answers to your questions, as well as O&G service update, and Pearls of Wisdom. As we also like to take the opportunity to improve our bulletin, appreciate if you can also share your feedback in a [brief survey](#) (click this to access feedback form). Thank you for the continued support!

❖ Foreword by Dr Angela Koh | Head and Senior Consultant, Department of General Medicine, Sengkang General Hospital



Diabetes nephropathy is the leading cause of end-stage renal disease, both worldwide and in Singapore. Indeed, more than half of the patients on dialysis in Singapore have renal failure with diabetes as its main cause. Furthermore, survival is poorer among people with diabetes. Thus, it is of paramount importance to prevent diabetes kidney disease development and progression.

Fortunately, several therapeutic agents have shown great promise in improving renal outcomes. With the recently held CME webinar themed '**SGLT2 Inhibitors – Practical Considerations**' helmed by SKH Endocrinology and Nephrology services, as well as the accompanying articles in this issue of the GP eBulletin, I am certain that you will gain insights on the care of people with diabetes and diabetes nephropathy.

❖ SKH CME Webinar | SGLT2 Inhibitors – Practical Considerations

SKH recently held a GP CME webinar on 10 March 2022 featuring a panel led by SKH Nephrologists, Endocrinologists as well as a Primary Care Physician, who shared key takeaways and practical considerations in the role and approach to SGLT2 inhibitors. Missed the webinar? You can view the recorded session by clicking the 'play video' button or [this link](#).



PANEL SPEAKERS:



Dr Shashidhar Baikunje
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Renal Medicine Service
SKH Dept of General Medicine



Dr Mayank Chawla
Consultant
Renal Medicine Service
SKH Dept of General Medicine



Dr Tay Wei Lin
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SKH Dept of General Medicine




Dr Wong Kia Boon
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- **1 CME point will be awarded to eligible GPs.**
- Doctors who attended the actual webinar will have points submitted by SKH on your behalf.
- Doctors who watch the recorded webinar in your own time can submit self-claims via SMC portal (under Cat 3A). Please contact [Ms Julian Ang \(Julian.ang.x.l@skh.com.sg\)](mailto:Julian.ang.x.l@skh.com.sg) to obtain the SMC-accredited and approved event ID for your Cat 3A self-claim.
- This webinar is part of a series of GP webinars. Details of the next webinar will be shared soon. Stay tuned!

Here are some unanswered Questions & Answers from the recent CME webinar:

+ On SGLT2 inhibitors

Q **Your Questions**
A **Answered!**



By Dr Shashidhar Baikunje, Head and Senior Consultant, Renal Medicine Service, and
Dr Tay Wei Lin, Consultant, Endocrinology Service, Department of General Medicine

QUESTION #1

Will it be good clinical practice to start all new type-2 DM patients on Dapagliflozin in view of its benefits?

ANSWER: First line therapy depends on the comorbidities of the patient, patient-centred treatment factors (weight, cost, risk of hypoglycemia etc.) and should include lifestyle modifications and metformin if no contraindications. Guidelines strongly recommend starting SGLT2 inhibitors in patients with a history of atherosclerotic cardiovascular disease, heart failure and CKD with albuminuria. In addition to the cardiovascular and renal benefits of this class of drugs, they have benefits of low risk of hypoglycemia, weight loss, and blood pressure lowering.

In the absence of the earlier mentioned indications for initiation of SGLT2 inhibitors, if your patient is likely to benefit from the other metabolic benefits of SGLT2 inhibitors on top of its glucose-lowering effect, you may want to consider starting such patients on an SGLT2 inhibitor as well.

QUESTION #2

What is the likely benefit when comparing SGLT2 inhibitors against DPP4 or Sulfonyureas?

ANSWER:
Both DPP4 inhibitors and Sulfonylureas are neutral with regards to cardiovascular safety and benefit, while SGLT2 inhibitors have been demonstrated to reduce the risk of major adverse cardiovascular events as a class and hospitalisation for heart failure.

Sulfonylureas being insulin secretagogues are associated with an increased risk of hypoglycemia, whereas the risk of hypoglycemia is low with DPP4 inhibitors and SGLT2 inhibitors. Sulfonylureas can cause weight gain, DPP4 inhibitors are weight-neutral, SGLT2 inhibitors are associated with some weight loss.

QUESTION #3

In an obese patient, BMI 30 and screening HbA1c 10%, newly diagnosed DM – is it safe to start SGLT2s rightaway or is there a higher risk of DKA in individuals with poorly controlled DM?

ANSWER:
The risk of DKA is generally higher in a diabetic individual who has had a long duration of type 2 diabetes mellitus and is hence more likely to have significant pancreatic beta cell failure. There is no specific HbA1c threshold above which the risk of DKA is higher.

Based on most recommendations, if the patient's screening HbA1c is 10%, I would recommend insulin therapy up front as oral agents alone are unlikely to adequately manage the hyperglycemia. Adding on an SGLT2 inhibitor on top of insulin therapy in such instances would be a feasible and safer initial treatment option.

QUESTION #4

Once a patient has euglycaemic DKA due to EMPA, should we stop using EMPA in the future?

ANSWER:
Yes, we should stop using SGLT2 inhibitors in the future in patients who have developed euglycaemic DKA.

❖ Highlights

New Paradigm in Managing Patients with Chronic Kidney Disease

SGLT2 Inhibitor Treatment for Chronic Kidney Disease



Dr Mayank Chawla
Renal Medicine Service
Department of General Medicine

Over the last three decades, the prevalence of chronic kidney disease (CKD) has increased by 29% worldwide. This has resulted in a burden of approximately 36 million disability-adjusted life years, according to estimates from the last Global Burden of Disease Study.

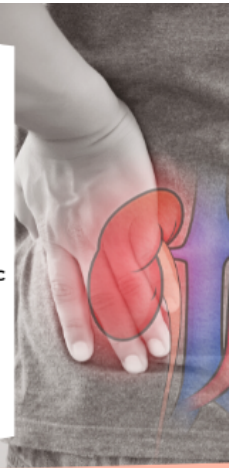
CKD is responsible for the bulk of these cases in Singapore. As a result, we rank first in the world in the incidence of diabetes-induced kidney failure.

The introduction of renin angiotensin aldosterone system (RAAS) inhibitors and receptor blockers in the late 1990s provided a breakthrough to retard the progression of both DKD and non-diabetic proteinuric CKD. However, despite optimisation of these drugs along with control of other risk factors, residual risk associated with progressive CKD remains high.

NEW PARADIGM

A new paradigm in managing our patients with CKD has been driven by the sodium glucose linked transporter 2 inhibitors (SGLT-2i). Strong evidence has emerged that these drugs are effective in:

- Delaying CKD progression in diabetic and non-diabetic kidney disease with GFR > 25ml/min/1.73m².
- Reducing cardiovascular mortality which is the biggest killer in CKD patients.



RECOMMENDED USE

International guidelines have recommended their use as first line in diabetics with and without kidney disease. Based on the current evidence, most patients with CKD who are at significant risk of progression should be on it, unless contraindicated.

Aggressive use of these drugs along with other time-tested measures should hopefully see significant improvement in the global burden of CKD in the years to come.

If you are interested to know more, please contact: Dr Mayank Chawla

Email: mayank.chawla@singhealth.com.sg

Join the GPFIRST Programme (Northeast Region)



Dr Koh Shao Hui

CONSULTANT, DEPARTMENT OF EMERGENCY MEDICINE. SKH
CLINICAL LEAD, SKH GPFIRST PROGRAMME

Singapore has one of the highest rates of diabetes prevalence worldwide, with one in three Singaporeans being at risk of developing diabetes in their lifetime. This increase is especially evident when we look at diabetic-related attendances to SKH Emergency Department (ED).

A sizeable number present with recurrent infections and/or complications of organ injury, such as renal failure, ischaemic heart disease and strokes. Most of these patients have poorly controlled blood sugar levels, with a proportion having Diabetic

Ketoacidosis or Hyperosmolar Hyperglycaemic Syndrome as well.

As the cornerstone of primary care, our GPs play a crucial role in early detection of this condition, follow-up and right-siting of patients with complications to our ED and Specialist Outpatient Clinics.

I would like to encourage all GPs to sign up for our GPFIRST programme which has helped to encourage more people to visit GPs for less severe conditions instead of heading to the ED.

GPFIRST
YOUR FAMILY DOCTOR, YOUR FIRST STOP

Patients referred by a participating GP to the SKH Emergency Department are eligible for a waiver of S\$50 off the ED attendance fee. They will also be accorded higher priority over P3 cases when they arrive at the ED.

GPs also get access to our 24hr ED consultant hotline, GPFIRST Whatsapp chat, and shared GP drive containing useful resources that you can refer to.



To find out more, contact Ms Ivy Goh at ivy.goh.y.h@skh.com.sg.



If you are interested to know more, please contact:

Ms Ivy Goh

Email: ivy.goh.y.h@skh.com.sg

Please also visit www.gpfirst.sg for more information.

❖ Services

Service Spotlight: Obstetrics & Gynaecology Clinic @ SKH

The Obstetrics & Gynaecology Clinic@SKH is a collaborative set-up between Sengkang General Hospital and KK Women's and Children's Hospital (KKH)'s Division of Obstetrics & Gynaecology (O&G) to serve women's healthcare needs in north-eastern Singapore. The clinic is staffed by specialist consultants from KKH and supported by a team of nurses.

We offer a full range of O&G specialised services including normal pregnancy care, postnatal pregnancy care, women's health screening, women's cancer screening, management of common gynaecological problems and menopause related issues.

O&G Services at SKH

1. General Obstetrics

- Antenatal (before birth) care, including standard tests and postnatal (after birth) care for low-risk pregnancy, until around 28 weeks of gestation. Thereafter, patients can be transferred to KKH seamlessly for continuity of care.
For termination of pregnancy, please refer directly to KKH.

2. Benign Gynaecology

- Outpatient consultation on management of common gynaecological problems, such as uterine fibroids, endometriosis, menstrual disorders and contraception.

3. Women's Cancer Screening

- Pap smear test, HPV testing, cervical cancer vaccination, blood test and pelvic ultrasound.
For abnormal mass with high suspicion of cancer, please refer directly to KKH.

4. Menopause

- Management of menopause conditions, such as use of hormone replacement therapy, and prevention and detection of osteoporosis.

To make an appointment, please contact:

Outpatient Appointment Hotline: **6930 6000**

Email: appointments@skh.com.sg

Teleconsultation Services for Patients

SKH offer teleconsultation services for the following clinical specialties and allied health services below.

(Note: Patient's eligibility for teleconsultations will be assessed after the first face-to-face consult with the SKH healthcare professional)

Doctor Consultations	
<ul style="list-style-type: none"> • Bariatric Surgery • Breast Surgery • Cardiology • Colorectal Surgery • Endocrinology & Diabetes • Gastroenterology • General Surgery • Geriatric Medicine • Haematology • Hepatobiliary Surgery • Infectious Diseases • Internal Medicine • Hand Surgery 	<ul style="list-style-type: none"> • Neurology • Neurosurgery • Orthopaedic Surgery • Otolaryngology (ENT) • Pain Management • Palliative Medicine • Psychiatry • Renal Medicine • Respiratory Medicine • Rheumatology • Sleep Medicine • Upper Gastrointestinal Surgery • Urology
Non-Doctor Consultations	
<ul style="list-style-type: none"> • Preoperative Evaluation • Outpatient Cardiac Rehabilitation 	<ul style="list-style-type: none"> • Anti-Coagulation Clinic • Dietetics • Medical Social Services • Occupational Therapy • Psychology • Speech Therapy
<p>SKH patients also pay lower teleconsultation charges than face-to-face (F2F) consultation charges. Applicable for those with doctor consultations only.</p> <ul style="list-style-type: none"> ▪ Video Consult: Same rate as F2F consultation charges (20% discount valid till 30 June 2022) ▪ Phone Consult: 25% cheaper than F2F consultation charges <p><i>* VC discount of 20% is not applicable for Non-Residents.</i></p>	



Adverse Effects of SGLT2 Inhibitors

With increasing evidence supporting the benefits of sodium glucose cotransporter 2 (SGLT-2) inhibitors, early initiation of this class of medications in individuals with established cardiovascular disease, heart failure and chronic kidney disease is recommended. We highlight the potential adverse effects and how we can prescribe these drugs more safely.

MORE COMMON

- Genital mycotic infections
- Urinary tract infections
- Volume depletion
- Hypoglycemia (if concomitant use of insulin or insulin secretagogue)

LESS COMMON

- Acute kidney injury
- Diabetic ketoacidosis (DKA)
- Lower limb amputations
- Bone fractures
- Fournier's gangrene

SAFE PRESCRIBING PRACTICES

- Avoid prescribing SGLT2 inhibitors to individuals with type 1 diabetes, Latent Autoimmune Diabetes of Adults, pregnant women, excessive alcohol consumption, inconsistent or low carbohydrate intake.
- Initiate SGLT2 inhibitor at the lowest dose. Avoid stopping insulin abruptly or reducing the dose excessively.
- Advise patients to hold SGLT2 inhibitor when acutely unwell, poor oral intake, prolonged fasting and prior to surgical procedures.
- Watch volume status especially in individuals on diuretic therapy.
- Educate patients about symptoms of genital mycotic and urinary tract infection and to maintain good perineal hygiene.
- Counsel about symptoms of DKA (malaise, nausea, vomiting, abdominal discomfort).

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If you have any questions or wish to provide feedback, please email Julian.ang.x.l@skh.com.sg
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