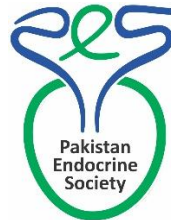


# PES Endocrine Monthly Round-Up

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April 2026



## Editor's Perspective

April brings a diverse set of clinically relevant updates across endocrine practice, including new evidence on levothyroxine dosing flexibility, the largest UK trial to date evaluating CGM in type 2 diabetes on modern therapies, long-term metabolic risk associated with early-life obesity, and the impact of chronic TSH suppression on menopause-related health in women with differentiated thyroid carcinoma. Together, these studies reinforce the importance of personalised, risk-stratified care across thyroid, metabolic, and renal endocrinology.

## Research Highlights

### 1. Fasting vs Nonfasting, Dose-Adjusted Levothyroxine Ingestion — Randomized Clinical Trial

#### Study Focus:

Evaluation of whether levothyroxine taken with breakfast (with a 15% dose increase) maintains biochemical stability compared with traditional fasting ingestion.

#### Key Findings:

- TSH stability was equivalent between fasting and nonfasting groups ( $\approx 74\%$  in both).
- Free T4 and total T3 levels were also similar.
- Patients reported better well-being and strong preference for nonfasting intake.
- $\sim 89\%$  chose to continue nonfasting LT4 at study end.
- No safety concerns identified.

#### Clinical Takeaway:

A modest 15% dose increase allows levothyroxine to be taken with breakfast without compromising biochemical control, improving convenience and patient satisfaction.

### 2. Continuous Glucose Monitoring vs SMBG in Type 2 Diabetes — FreeDM2 Randomised Trial

#### Study Focus:

Large UK multicentre RCT evaluating real-time CGM versus SMBG in adults with type 2 diabetes treated with basal insulin plus SGLT2 inhibitors and/or GLP-1 or dual GIP/GLP-1 receptor agonists.

**Key Findings:**

- Baseline HbA1c: 8.8% in both groups.
- At 16 weeks: CGM 8.0% vs SMBG 8.7% (difference  $-0.6\%$ ;  $p < 0.0001$ ).
- At 32 weeks: CGM 7.8% vs SMBG 8.3% (difference  $-0.5\%$ ;  $p < 0.0001$ ).
- Early improvements occurred during self-management despite similar insulin dose changes.
- CGM users showed healthier dietary choices and higher physical activity.
- No increase in hypoglycaemia; two severe episodes occurred only in SMBG group.
- CGM adherence was excellent (median 97–98%).

**Clinical Takeaway:**

Real-time CGM significantly improves HbA1c, time-in-range, and self-management behaviours in adults with type 2 diabetes on basal insulin plus modern therapies, supporting wider adoption in routine care.

**3. Weight Trajectories, Obesity Onset (17–60 Years), and Cause-Specific Mortality — ODDS Pooled Cohort Study****Study Focus:**

Swedish pooled cohort assessing how weight gain patterns and age of obesity onset influence long-term mortality.

**Key Findings:**

- Median weight gain from 17–60 years was 0.42 kg/year.
- Early obesity onset (17–29 years) markedly increased all-cause mortality (HR  $\sim 1.7$ ).
- Rapid early-adult weight gain increased mortality from cardiovascular disease, cancers, diabetes, digestive and renal disease.
- Later-life weight gain showed weaker associations.
- Longer exposure to metabolic stress likely drives risk.

**Clinical Takeaway:**

Preventing early-adult weight gain is critical, as obesity before age 30 confers the highest long-term mortality risk.

**4. Menopause-Related Health Outcomes in Women with Differentiated Thyroid Carcinoma on Long-Term TSH Suppression****Thyroid (ATA), 2026****Study Focus:**

Assessment of how long-term TSH suppression after total thyroidectomy affects menopause-related health outcomes in women with differentiated thyroid carcinoma (DTC).

**Key Findings:**

- Chronic suppression worsened vasomotor symptoms (hot flashes, sleep disturbance).
- Lower bone mineral density and higher rates of osteopenia/osteoporosis were observed, especially post-menopause.
- Mild cardiovascular effects consistent with subclinical hyperthyroidism (higher resting heart rate, atrial ectopy).

- Quality-of-life scores reflected greater fatigue, anxiety, and thermoregulatory symptoms.
- Relaxing suppression in low-risk women did not increase recurrence risk.

**Clinical Takeaway:**

Long-term TSH suppression can exacerbate menopause-related symptoms and negatively impact bone and cardiovascular health. These findings support risk-stratified TSH targets, especially once patients transition to low-risk disease status.

**Review Article of the Month**

GLP-1 Receptor Agonists in Chronic Kidney Disease — Current Insights and Future Directions

**Key Insights:**

- GLP-1RAs provide renal benefits beyond glycaemic control, including reduced albuminuria and slower eGFR decline.
- Effects appear additive to SGLT2 inhibitors.
- Semaglutide now shows slowed CKD progression and reduced mortality in diabetic CKD.
- Mechanisms include reduced inflammation, oxidative stress, fibrosis, and improved endothelial function.
- Future directions: use in non-diabetic CKD and evaluation of dual/triple incretin agonists.

**Clinical Takeaway:**

GLP-1RAs are becoming a key therapeutic class in CKD management, with expanding roles beyond diabetes as evidence grows.

**For Further Reading**

Fasting vs Nonfasting Levothyroxine Trial: <https://doi.org/10.1210/clinem/dgaf686>

ODDS Cohort Study (Weight Trajectories & Mortality):

<https://doi.org/10.1016/j.eclinm.2026.103870>

FreeDM2 Trial: CGM vs SMBG in Type 2 Diabetes: [https://doi.org/10.1016/S2213-8587\(26\)00076-8](https://doi.org/10.1016/S2213-8587(26)00076-8)

Menopause-Related Outcomes in DTC on Long-Term TSH Suppression:

<https://doi.org/10.1177/10507256261442839>

GLP-1RA Review in CKD: <https://doi.org/10.2147/IJNRD.S522424>

## Closing Note

April's studies reinforce the importance of early metabolic intervention, patient-centred dosing strategies, and the expanding therapeutic reach of incretin-based agents. As evidence evolves, integrated endocrine-renal care continues to gain prominence.

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