Kidney Connections
Real Lives, Real Solutions in ADPKD: Practical Insights for Health Care Providers

Major recent development in ADPKD

- Publication of the KDIGO 2025 Clinical Practice Guideline on ADPKD,[1] the first KDIGO guideline devoted entirely to ADPKD
- The guideline covers all aspects of the diagnosis and management of ADPKD and its extrarenal manifestations
- Reference: KDIGO ADPKD Work Group. KDIGO 2025 clinical practice guideline for the evaluation, management, and treatment of autosomal dominant polycystic kidney disease (ADPKD). *Kidney Int*. 2025;107(2S):S1-S239.

KDIGO.ORG Guidelines

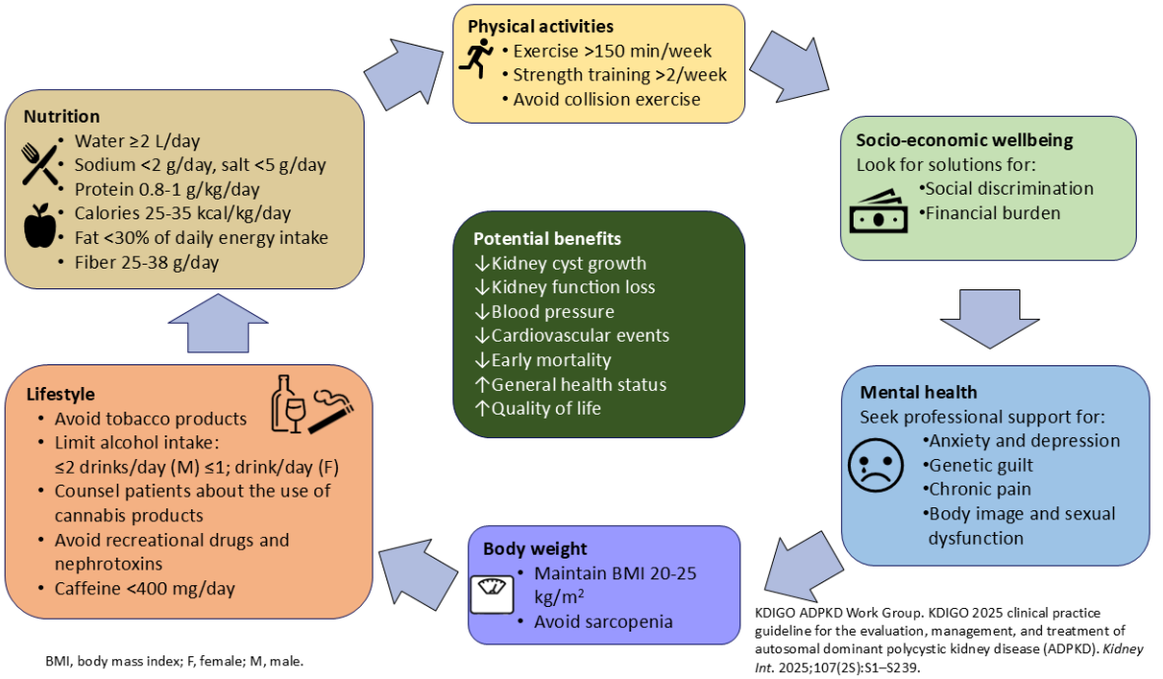
Tool to assess risk of ADPKD progression[1]

- Mayo Imaging Classification (MIC): uses height-adjusted total kidney volume (htTKV) and age to predict progression risk

MIC

ADPKD treatment goals[1,2]

- Delay kidney function decline and onset of kidney failure
- Manage hypertension and cardiovascular risk
- Control pain, manage infections and extrarenal manifestations
- Patient-centered care and shared decision-making



BMI, body mass index; F, female; M, male.

KDIGO ADPKD Work Group. KDIGO 2025 clinical practice guideline for the evaluation, management, and treatment of autosomal dominant polycystic kidney disease (ADPKD). *Kidney Int*. 2025;107(2S):S1–S239.

Disease-modifying pharmacologic therapy

- Tolvaptan (JYNARQUE®) is the first and only medication approved by the FDA to slow kidney function decline in adults at risk of rapidly progressing ADPKD. [1,3] Other therapies for ADPKD are in development.[4]
- Tolvaptan is a selective vasopressin receptor-2 antagonist recommended for patients with an eGFR ≥25 mL/min per 1.73 m² and risk of rapid disease progression as indicated by either MIC class 1C to 1E or historical rate of eGFR decline (≥3 mL/min per 1.73 m² per year)[1,3]
- The TEMPO 3:4[5] and REPRISE[6] studies were the pivotal clinical trials of tolvaptan treatment for ADPKD. Tolvaptan slowed increase in TKV and reduced annual eGFR decline by 26% to 35%.[5,6] The greatest benefit was seen in patients <55 years who had relatively better eGFR, but a post-hoc analysis concluded that patients >55 years could also benefit.[7]
- It is estimated that tolvaptan treatment may delay the onset of chronic kidney disease by approximately 1.5 to 7 years; the greatest delay is seen when treatment is started when the eGFR is relatively higher.[8]
- The most common adverse reaction to tolvaptan therapy is aquaresis symptoms (thirst, polyuria, nocturia, urinary frequency, and polydipsia).[3] Drug-induced liver injury may result from tolvaptan therapy; patient, prescriber, and pharmacist participation in a REMS program is mandatory to monitor for liver injury.[3]
- See full prescribing information for tolvaptan for contraindications, dosing, adverse effects, and REMS information.[3]

Help patients get off to a good start with disease-modifying therapy

- Educate patients about what to expect and prepare them to manage aquaresis symptoms on tolvaptan
- Start tolvaptan on a non-work day[9]
- Gradually increase the dose of tolvaptan (see KDIGO 2025 guideline for titration strategy)[1]
- Aquaresis symptoms usually improve after the initial titration period, and most people adapt over a period of days to months[1,9,10]
- Identify lifestyle factors and daily routines that may pose barriers to medication adherence and persistence; problem-solve with patients about how to overcome these
- Provide written tips and instructions (see Patient Handout for this activity)
- Arrange early follow up (2 weeks after starting tolvaptan) to check liver function tests, other labs, and assess response and aquaretic effects

Patient Handout

Tips for managing thirst and frequent urination on tolvaptan[1,9]

- Instruct patients to do the following:
  - Drink frequently and spread out your fluid intake over the day and night
  - Choose plain water—it is the best replacement fluid
  - Avoid drinks with sugar or fat, and limit caffeine and alcohol
  - Add citrus to plain water, or try sparkling water, for a change of pace
  - Ensure access to water at all times; always have a water bottle close at hand
  - Plan ahead for bathroom breaks, especially for work or travel
  - Eat a larger lunch and a lighter dinner to reduce nocturia
- Limit salty and high-protein foods (higher solute load) that can increase thirst
- *Educate patients about the signs and symptoms of dehydration and when it is most likely to occur (eg, warm weather, exercise, fever, diarrhea, vomiting, or times when patients cannot drink or access to water is limited)*
- Create an individualized, written plan to prevent and manage dehydration by adjusting fluid intake or holding tolvaptan, when indicated

When to hold tolvaptan[1,9]

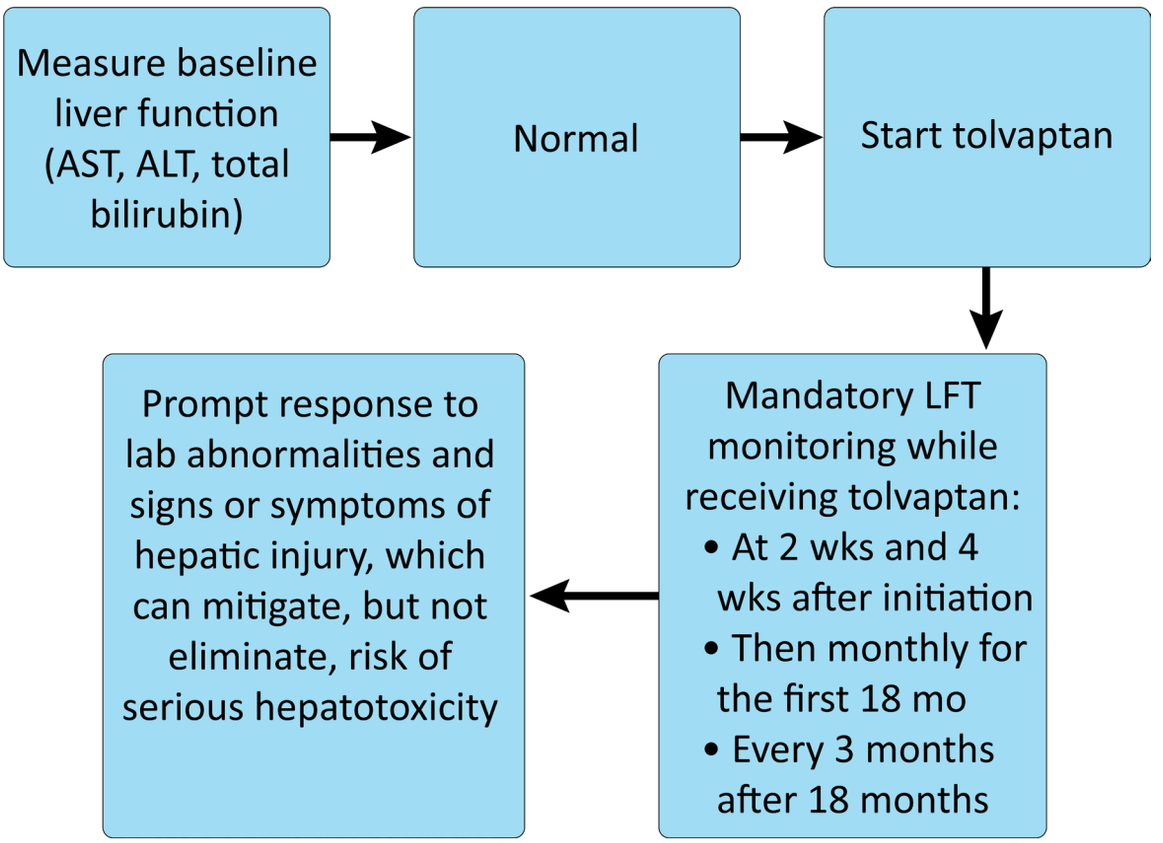
- Limited water intake or access
- Limited restroom access (eg, travel)
- Acute illness (vomiting, diarrhea, fever)
- Warm weather activities that increase insensible fluid loss
- General anesthesia (hold for 3-4 days before surgery)

Tolvaptan REMS program monitoring

- Participation in a Risk Evaluation and Mitigation Strategy (REMS) program is required by the US Food and Drug Administration to manage the risk of serious and potentially fatal liver injury associated with use of tolvaptan for ADPKD[11]: https://tolvaptanadpkdsharedrems.com/#Main

REMS

- Most liver transaminase elevations occur within the first 18 months of treatment with tolvaptan and resolve within 1-4 months after stopping the medication.[1]
- Possible severe drug-induced liver injury occurred in 0.8% of patients (82 of 10,879) taking tolvaptan; no deaths or liver transplants occurred due to drug-induced liver injury in an analysis of 5 years of US REMS program data (2018–2023).[12] See KDIGO 2025 guideline for detailed information about treatment discontinuation.[1]



Additional resources for health care providers and patients

- PKD Foundation - https://pkdcure.org
- National Kidney Foundation - https://www.kidney.org

References

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