



# Video Urodynamics in Children

## Essential Do's, Don'ts, and Indications

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# Introduction

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- Brief overview of video urodynamics in pediatric urology
- Importance of proper technique and interpretation

# When to Perform Video Urodynamics:

- Recurrent urinary tract infections with voiding dysfunction symptoms
- Signs of significant underlying issues posing risk to bladder or kidney function
- Failure of medical management or behavioral modification to improve symptoms

# When to Perform Video Urodynamics:

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- Evidence of neurological problems affecting the bladder and pelvic floor
- Evaluation of children with congenital conditions affecting the bladder
- Assessment of bladder function in children with vesicoureteric reflux
- Monitoring of patients with posterior urethral valves

# When to Avoid Video Urodynamics:

- Presence of active urinary tract infection
- When simpler, non-invasive tests can provide sufficient information
- In very young children where behavioral interventions haven't been fully explored

# The Do's

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## 1. Prepare Thoroughly

- Conduct pre-test familiarization visits
- Use age-appropriate explanations
- Involve child life specialists when available

# The Do's

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## Create a Child-Friendly Environment

- Maintain comfortable room temperature
- Allow parent/caregiver presence
- Provide distraction tools

# The Do's

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## Ensure Technical Accuracy

- Select appropriate catheter size (typically 6-8Fr in children)
- Adjust filling rates for age (5-10% of expected bladder capacity per minute)
- Synchronize pressure measurements with imaging



# The Do's

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## Interpret Results Carefully

- Use age-specific normal values
- Correlate findings with clinical context

# The Don'ts

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## Avoid Preparation Pitfalls

- Don't skip antibiotic prophylaxis (start 24 hours before)
- Don't discontinue regular medications without specific indication
- Don't proceed without ruling out active urinary tract infection

# The Don'ts

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## Prevent Technical Errors

- Don't use inappropriate filling rates
- Don't measure compliance during detrusor contractions
- Don't fail to correlate urodynamic tracings with radiographic images

# The Don'ts

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## Minimize Discomfort and Anxiety

- Don't rush the procedure or ignore signs of distress
- Don't use adult-sized equipment on children
- Don't exclude parents/caregivers unless absolutely necessary

# The Don'ts

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## Avoid Interpretation Mistakes

- Don't misinterpret normal age-specific findings as pathological
- Don't inadequately label key events on tracings
- Don't ignore the clinical history when interpreting results

# Conclusions

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- **Every child is unique:** Adapt approach to medical and emotional needs.
- **Balance precision with compassion:** Technical accuracy + patient comfort.
- **Use judiciously:** Reserve video urodynamics for cases where benefits outweigh challenges.

# Precision and individuality over categorization

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*“Πλεῖον ἐστὶν εἰδέναι ὁποῖον τὸν νοσοῦντα ἢ ὁποῖον τὸ νόσημα.”*

*Hippocrates*

*“It is far more important to know what person the disease has than what disease the person has.”*



