Vaccination for Herpes virus – Shingrix®

(Recombinant Zoster Vaccine, Adjuvanted)

Varicella-Zoster Virus (VZV)

POWERFUL PROTECTION AGAINST SHINGLES & POSTHERPETIC NEURALGIA (PHN)

More than **90% effective** at preventing shingles and PHN*

*Clinical trial data

2-DOSE SERIES

FOR STRONG, LONG-LASTING PROTECTION

DOSE 1 → 2 TO 6 MONTHS APART → DOSE 2

Recommended for:

- Adults 50 years and older
- Adults 19 years and older who are immunocompromised

HELPS PREVENT

- ✓ Shingles
- ✓ Postherpetic Neuralgia (PHN)

WHO CAN GET IT?

Even if you had shingles before, had chickenpox, or received the older shingles vaccine (Zostavax®).

COMMON SIDE EFFECTS

Sore arm • Fatigue • Headache
Muscle aches • Fever • Chills
(Usually 1–3 days)

NOT A LIVE VACCINE

Shingrix is a non-live vaccine and cannot cause shingles.

TALK TO YOUR HEALTHCARE PROVIDER

See if Shingrix® is right for you.

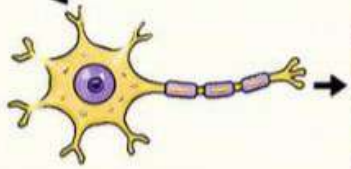
SHINGRIX® by GSK – STRONGER PROTECTION. BETTER TOMORROW.

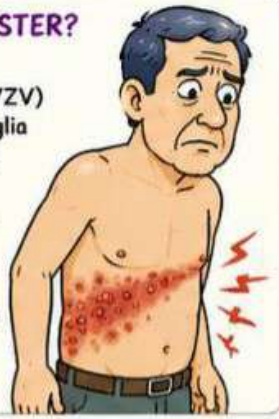
HERPES ZOSTER (VZV) AND KIDNEY/IN CKD

Shingles (Herpes Zoster) is more common, more severe and more complicated in CKD

WHAT IS HERPES ZOSTER?

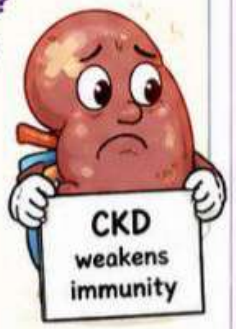
Reactivation of Varicella-Zoster Virus (VZV) latent in dorsal root ganglia causes painful, unilateral vesicular rash in a dermatomal distribution.





WHY HIGHER RISK IN CKD?

- Impaired cell-mediated immunity (uremia, inflammation)
- Diabetes mellitus
- Older age
- Malnutrition
- Steroids / Immunosuppressants
- Dialysis
- Kidney transplantation

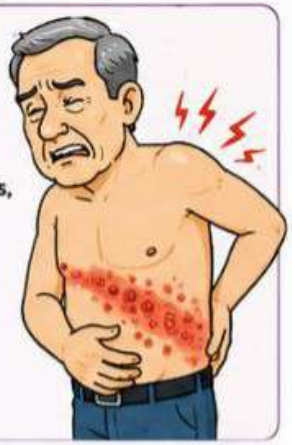


Incidence:
1.5–2 times higher in CKD
Much higher after transplant

CLINICAL FEATURES

- Painful tingling/burning followed by vesicular rash
- Unilateral, dermatomal
- Common: thoracic dermatomes, trigeminal (ophthalmic)

In CKD patients:
- More extensive lesions
- Delayed healing
- Secondary infection
- Disseminated zoster may occur



RENAL IMPLICATIONS

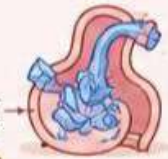
1. Acute Kidney Injury (AKI)

- Sepsis
- Dehydration
- Rhabdomyolysis (rare)
- Multiorgan involvement

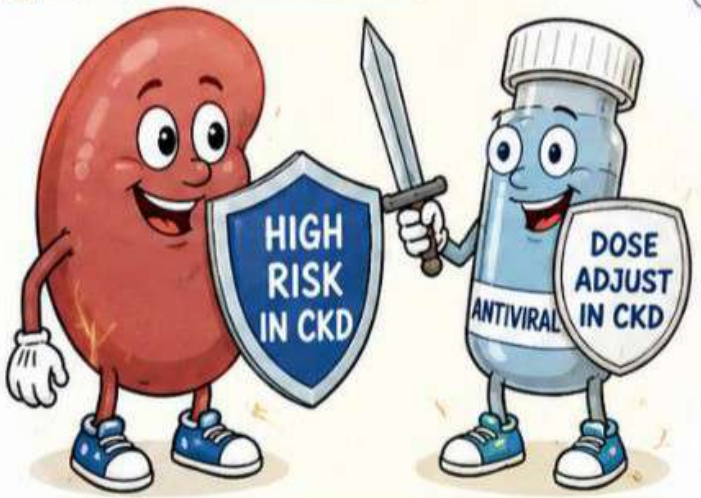
2. Drug-Induced Nephrotoxicity

Mainly due to Antivirals
(Acyclovir, Valacyclovir, Famciclovir)

- Crystal nephropathy
- AKI
- Neurotoxicity in CKD



PREVENTION
- ✓ Dose adjustment as per eGFR
- ✓ Adequate hydration
- ✓ Slow IV infusion



ANTIVIRAL DOSE ADJUSTMENT IN CKD

Antivirals: Acyclovir, Valacyclovir, Famciclovir

eGFR (ml/min/1.73m²)	What to do
> 50	Usual dose
10 – 50	Reduce dose / increase dosing interval
< 10 or Dialysis	Markedly reduced dose (Give after dialysis)

Overdose can cause:
Confusion, tremors, hallucinations, encephalopathy, crystal nephropathy

COMPLICATIONS IN CKD PATIENTS

Neurological	Ocular	Cutaneous	Visceral (rare)
• Post-herpetic neuralgia • Meningitis • Encephalitis	• Keratitis • Uveitis • Vision loss	• Disseminated zoster • Necrotic lesions • Secondary infection	• Pneumonitis • Hepatitis • Vasculopathy

Post-herpetic neuralgia – very common and severe in CKD

DIALYSIS PATIENTS

- Higher incidence
- Severe pain syndromes
- Higher recurrence
- Dose antivirals after dialysis

KIDNEY TRANSPLANT RECIPIENTS

- Very high risk
- Disseminated & visceral disease
- May need IV acyclovir
- Consider reduction of immunosuppression

VACCINATION (PREVENTION)

Recombinant Zoster Vaccine (RZV) – Shingrix®

- ✓ Non-live vaccine
- ✓ Safe in CKD, dialysis, transplant candidates
- ✓ Highly effective

Recommended for:	Schedule:
Adults ≥ 50 years, CKD stages 3–5, Dialysis patients, Transplant candidates	2 doses (2–6 months apart)

KEY POINTS (Remember!)

- CKD → Impaired Cell-mediated Immunity
- ↑ Incidence & Severity of Herpes Zoster
- Antivirals need Renal Dose Adjustment
- Major complication: Post-herpetic Neuralgia
- Overdose → Neurotoxicity + Crystal Nephropathy
- Best prevention: Shingrix (RZV) Vaccine

One-line Summary:
"Herpes zoster is more frequent and severe in CKD due to impaired cell-mediated immunity; management requires careful antiviral dose adjustment and emphasis on vaccination."