How long does a hip replacement last?

- Meta-analyses: 150 case series (44 usable) & Finland/Australia registries
 - Case Series = 13,212 hip replacements & registry = 215,676
 - Age ~58-74, 55-59% female, 62%-89% due to OA.
- Outcomes:

	≥15 years	≥20 years	≥25 years
Published Case Series	86%	79%	78%
Country Registries	89%	70%	58%

• Bottom Line: Almost 90% of hip replacements last ≥15 years and 58-78% last ≥25 years.

Lancet 2019; 393: 647–54.

What's Topical in Actinic Keratosis Treatment?

- 624 Dutch (mean age 73, 89% male). Multiple (mean 15) AK on face/vertex.
 - Only 8% level III (thicker keratosis) lesions.
 - 4 treatments: 5% Fluorouracil (5FU) cream, 5% imiquimod cream, methyl aminolevulinate photodynamic therapy (MAL-PDT), 0.015% ingenol mebutate

	Fluorouracil	Imiquimod	MAL-PDT	Ingenol
≥75% AKs Resolved	75%	54%	38%	29%
NNT for 5FU	-	5	4	3
Adverse Events	Erythema, erosions, vesicles, scaling		Pain/burning (NNH~2-3)	Same as 1 st two

- **Bottom-Line**: Fluorouracil is the best field treatment for AK.
 - TFP: smaller RCTs, 5% FU had best numbers

N Engl J Med 2019;380:935-46.

Vitamin D Dose: Bigger is always better

- RCT (303 Calgarians): 400IU or 4000IU or 10,000 IU/day oral x 3 years
 - 54% male, mean age 62, mean Vit D level 79 nmol/L, mean BMD T-score ~0

RESULTS	400 IU/day	4,000 IU/day	10,000 IU/day
New Vitamin D Level (nmol/L)	77	132	144 (200 at 18 mon)
Loss of Bone Mass Radius	-1.2 %	-2.4%	-3.5%
Loss of Bone Mass Tibia	-0.4%	-1.0%	-1.7%

• Others similar

- QoL, falls, fractures, stability testing, etc No diff (study small + pt low risk)
- *4 RCTs (dose 60K/month 500K/yr) worse falls in 3 / worse fractures in 2.

Bottom-Line: Another study showing harms (albeit surrogate) of high dose vitamin D. Until we prove clear benefit, we should not give high doses.

JAMA. 2019;322(8):736-745

Wait: Does weight impact diabetes?

- RCT of 298 primary care patients: DM <6yrs, BMI 27-45, not on insulin.
 - Diet replacement (Counterweight-Plus) ~840 kcal/day for 3 months (+ 2 optional) then slow re-intro. Stopped all DM and Hypertension drugs (added with monitoring)
 - In 2 yr follow-up if Wgt gain ≥2 kg, offered 2-4 week rescue
 - Baseline Mean patient = 54 y.o., 59% male, BMI 35, A1c 7.6%
- Results:
 - 1 yr: lost ≥15kg=0 vs 24% (NNT 5), Diabetes remission 4% vs 46% (NNT 3), QoI: down 3 vs up 7 (out of 100).
 - Remission by wt lost <5kg (7%), 5-10kg (34%), 10-15 (57%), & >15 (86%)
 - 2yr: lost ≥15kg=2% vs 11% (NNT 11), Diabetes remission 3% vs 36% (NNT 4), Qol: up 2 vs up 8 (out of 100).
- **Bottom-Line**: Surprise, weight loss can truly treat DM.

Lancet Diabetes Endocrinol. 2019;7(5):344-55. Lancet 2018; 391: 541–51