On behalf of Vision Expo, we sincerely thank you for being with us this year.

Vision Expo Has Gone Green!

We have eliminated all paper session evaluation forms. Please be sure to complete your electronic session evaluations online when you login to request your CE Letter for each course you attended! Your feedback is important to us as our Conference Advisory Board considers content and speakers for future meetings to provide you with the best education possible.

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Financial Disclosures

Kyle D. Klute, O.D. has no financial disclosures to include





























Case #1

- 1 single study
- Retrospective case series
- 36 eyes with "dense fundusobscuring vitreous hemorrhage"
- 24/36 had a retinal break
- So 12/36 did not have a retinal break

Conservation United Technology 200 Dev/NMUD 2079.4. en UNIVEGRET ACCOUNT OF A CONSTRUCTION OF A CONSTR

Affaltions a second PMID 1733209 20115/0716/0146-0300100222-3 Abstract Papers Indemnitis share and antional the incidence of which distances is expressed ingenitive intervase contractive interventional contractive intervention. Papers Intervention and Antional Papers Interventional Contractive Interventional Responses Tractive and Contractive Interventional Contractive Interventional Responses Tractive and Contractive Interventional Contractive Interventional Responses Intervention of the Interventional Contractive Interventional Contractive Responses Resultation of Homes American Sciences Interventional Contractive Responses Resultation of Homes American Sciences Interventional Contractive Intervention Responses Resultation of Homes Responses Interventional Contractive Results and documents (Lagolithic Inthe Intervention and Endotine contractive Intervention and Results Results documents (Lagolithic Inthe Intervention and Endotine Contractive Intervention and Results documents (Lagolithic Inthe Intervention and Results Intervention) and Results documents (Lagolithic Inthe Intervention and Results Interventions and Res

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"The plural of anecdote is not data "

BEN GOLDACRE, BAD SCIENCE

⁴⁴ The problem with journalism being that it is a highly nonrandom sample of the worst things that have happened in a given period.

"

STEVEN PINKER, IN AN INTERVIEW ON HIS BOOK RATIONALITY

17





Confounding Variables	
	Invest Contraint(1)), S.G. Aufler menuality, analytis in PMC (2014 Al 2). PMCD PMCF10387 Pathwer in fair adult from act Invest Contraint(1)), Sci. 2000 ann 3073, 35, 535. PMCF 10301755 Pathwer units 2000 pm 1 Ad 312.55(2)(2), 2), 312
	Prospective Epidemiological Cohort Study of Reduced Risk for Incident Cetaract with Vigorous Physical Activity and Cardionespiratory Fitness during a 7-Year Follow-up
	Autor Internation - DopytgHLand Userse Internation Depleter
What are some potential	The publisher's four edited version of this while is available of instal (arithmetric 36, 5c) See other articles in PMC that gip the published article.
confounding variables?	Abstract to to 10
	PURPOSE
	To test whether greater signrous physical activity (kilometers per week not) and greater confinence/entry fitness (10 km see performance in meters per second) reduce the incidence of clinically diagnosed cutrient.
	METHODS
	Prospective solunt study of self-reported clinical diagnosis of outerset in nondiabetic, non-regriterian, and nonmarking male (n = 20,023) and female nanoers (n = 11,047).
	AESU,75
	bother entrance were specified by 312 (2.5%) can set 17% (2.5%) cannot design (sum a 5%) 75% a \pm 0.6% (at 32.5% (at 32.5%) can of filtering a specific ly fit red fit radius cranue in loward with MM, such the fit rids is more 7.2% (32.5%) and 36.5% (32.5%) and 36.5% (set 32.5% (set 32.5%) and 36.5% (set 32.5% (set 32.5%) and 36.5% (set 32.5% (set 32.5

20

Observational Evidence What is it good for?





23

Candomization prevents investigators from introducing systematic (and often hidden) biases between experimental groups. It can assure that each arm has the same demographics and perhaps most importantly, randomization minimizes measured (and unmeasured) confounding factors.
PETER ATILA, MD

























Appraisal Evidence

 Cons
 Appraisals are only as good as the underlying evidence

35

Experience & Opinion What is it good for?











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Previously dx'd dry eye patient

- Using warm compresses and Omega3s and artificial tears
- Worse

Wakes up suddenly with eye pain
 Tx: Vectored Thermal Pulse



Cognitive Bias: Anchoring

- Contact lens patient overwear
- Tx: Prescribe antibiotics around the clock



43

What happened? The cover? The award?

- Classic example of "regression to the mean"
 Describes the natural history of a condition, especially acute





















Sackett DL, Rosenberg WMC, Gray JAM, Hayens RB. Evidence based medicine: what it is and what it isn't. British Journal of Medicine 1996



















Understanding Chance

- Absolute Risk = % Risk of Study Group 1 % Risk of Study Group 2
- Relative Risk = Absolute Risk % divided by % Risk of Study Group 1 Number Needed to Treat = 1 / absolute risk

 - i.e. how many people do you need to intervene with to reduce a single bad event?







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Putting it all together

Make Like Comparisons

Understand Chances

Is there any consistency with other studies and experience?

Randomized clinical trial of treatments for symptomatic convergence insufficiency in children Convergence humflower humener field blug forge ¹ Millione + engine Millione +

Pree PMC article

Objective: To compare home-based gene (p. oh-9479), home-based computer vegenerobiccommodative hensy and gene (p. bun-96 Hold Tri), edite-based vegenerobiccommodative hensy with home reinforcement (DDWAT), and effice-based give therapy with home individually (p. bundle) and the based give therapy with home individually (p. bundle) and the based give therapy with home individually (p. bundle) and the based give therapy with home individually (p. bundle) and the based give therapy with home individually (p. bundle) and the based give therapy with home individually (p. bundle) and the based give therapy with home individually (p. bundle) and the based give therapy with home individually (p. bundle) and the based give therapy with home individually (p. bundle) and the based give therapy with home individually (p. bundle) and the based give therapy with home individually (p. bundle) and the based give therapy with home individually (p. bundle) and the based give the based gives the ba

Convergence maintenancy were assigned to 1 or 4 treatments. Main outcome measures: Convergence insufficiency Symptom Survey score after 12 weeks of treatment. Secondary outcomes were near point of convergence and positive fusional vergence at near.

Reader. And 12 mails of instance, no collisity gravy near Consequence insufficiency graves frame graves and the second s

Putting it all together

Make Like Comparisons

Understand Chances

Is there any consistency with other studies and experience?

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Putting it all together

Make Like Comparisons
Understand Chances

Is there any consistency with other studies and experience?

Twelve weeks of OBVAT results in a significantly greater improvement in symptoms and clinical me of NPC and PFV and a greater percentage of patients reaching pre-determined criteria of success wh compared with HBPP, HBCVAT+, or OBPT.

65

Putting it all together

Make Like Comparisons

Understand Chances

Is there consistency with other studies and experience? Meas Analysis > Courtraine Database Syst Rev. 2020 Dec 2;12(12):CD000748. do: 10:1002/1405/958.0CD000164.au.3. Interventions for convergence insufficiency: a network meta-analysis

member were regorded for any of the included studies. Desident adherences are seguring for the inclusion of the included studies. Desident adherences are seguring for home asset of the inclusion of the inclusio

Conflict of Intervent statement Dr. Mithel Educations in the Dayl, Drue of the Convergence tourficiency Treasment Tole (IOTT) Budy Drue, Dru, San, San, San and Markan King and San an

separately for constraints and associate. Main results: We included 12 trials (six in children and six in adults) with a total of 1289





Clinical Case: 56 YO WF

▶ IOPs 22/31 c GAT

Visual Fields: Normal

ONH: 0.35/0.35
Pachs 556/549



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What is your plan?

- Refer for SLT
- Start Latanoprost qhs OU
- Continue to monitor



- ► My experience has shown me that...
- The standard of care is to...
- ► A Randomized Controlled Trial showed...
- You told me to do SLT in your lecture yesterday
- I hate glaucomaAll the above
- 2 of the above





Communicate Complexity

"So where are we with addressing uncertainties about the effects of treatments?...Despite general acknowledgement that patients are partners in medical research and healthcare decisions, the complexity of discussing therapeutic uncertainty is unnerving some doctors. Some are simply fearful of provoking anxiety - doubtless a genuine concern but nevertheless paternalistic. Others try to justify their actions in terms of a balance between two ethical arguments - whether the ethical duty to tell the truth extends to being explicit about uncertainties versus the moral obligation to protect patients from emotional burden. Are patients prepared to live with uncertainty? We need to find out. **Perhaps people are far more resilient than doctors suspect**."

--Evans I. More nearly certain. Journal of the Royal Society of Medicine. 2005.



