BSAVA Congress 2020

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Management of feline chronic kidney disease

An RCVS Knowledge webinar produced for BSAVA Congress

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BSAVA
BRITISH SMALL ANIMAL VETERINARY ASSOCIATION

RCVS KNOWLEDGE

Conflict of Interest Disclosure

I have no relevant financial interest, arrangement or affiliation with any company or organisation.

Quality Improvement

What is it?

Quality Improvement

It’s about working together, gathering *real* information ……. and finding practical things that we can do to continuously improve as a whole.

Learning Objectives

- To understand the advantages of creating clinical guidelines to improve the standards to which we work.
- To be able to design a clinical guideline and critically assess its value within your practice.

Management of feline chronic kidney disease

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Vet Professionals Ltd; www.vetprofessionals.com

Conflict of interest

I founded and am employed by Vet Professionals Ltd.

I provide consultancy services, lecturing, research etc. for a number of pharmaceutical companies and pet food companies including:

Boehringer Ingelheim; Ceva Animal Health; Dechra; Elanco; Eukanuba/Iams; Hill's Pet Nutrition; MSD Animal Health; Norbrook Laboratories; Royal Canin

I provide CPD for charities (Feline Friends, International Cat Care) and CPD organisations (e.g. BSAVA, BVNA, Central CPD, Webinar Vet, LVS, and others)

Management of CKD

What is the best way to achieve maximum length and quality of life?

What can we do to slow progression of CKD?

- Two major maladaptive processes on which we can have an impact:
  - Renal secondary hyperparathyroidism
    - Arises due to phosphate retention associated with CKD
  - Glomerular hyper filtration
    - RAAS activation results in glomerular hyper filtration and proteinuria
- And, we can address other factors thought to have an influence on progression
  - Systemic hypertension, dehydration etc.

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Renal secondary hyperparathyroidism

- Renal excretion of phosphate depends on glomerular filtration
- CKD → → → phosphate retention
- Retained phosphate complexes with ionized calcium reducing the ionized calcium fraction
- PTH production and release is stimulated
- Early CKD: compensatory mechanisms help to maintain normophosphataemia
  - ↑Parathyroid hormone (PTH)→ phosphatiuria
- PTH levels are increased before changes in plasma Ca and P levels are detected
- PTH levels may be increased before azotaemia develops in some cats

Renal secondary hyperparathyroidism

- As disease progresses, hyperphosphataemia develops
- → → → development of renal secondary hyperparathyroidism (R2HPTH)
  - ↓calcitriol production by the kidneys is the other major trigger
- R2HPTH triggers Ca and P release from bone (renal osteodystrophy), soft tissue mineralisation, progression of renal disease
- PTH is considered to be a ‘uraemic’ toxin
- R2HPTH is detrimental to survival

How can we prevent/reverse this?

- Phosphate restriction is currently considered the key to successful management
- Aim for blood phosphate levels in the lower half of the reference range to remove the stimulus for PTH production

Stage	Description	Creatinine results	Target phosphate levels
1	Non-Azotaemic	< 140 µmol/l *< 1.6 mg/dl* SDMA > 14 µg/dL	0.8–1.5 mmol/l *2.5–4.5 mg/dl*
2	Mild renal azotaemia	140-249 µmol/ *1.6–2.8 mg/dl*	< 1.5 mmol/l *< 4.5 mg/dl*
3	Moderate renal azotaemia	250-439 µmol/l *2.9–5.0 mg/dl* SDMA ≥25 µg/dl	< 1.6 mmol/l *< 5.0 mg/dl*
4	Severe renal azotaemia	> 440 µmol/l *> 5.0 mg/dl* SDMA ≥45 µg/dl	< 1.9 mmol/l *< 6.0 mg/dl*

NB many labs have inappropriate phosphate ranges for CKD patients

Sub-stage according to BP and proteinuria

www.iris-kidney.com

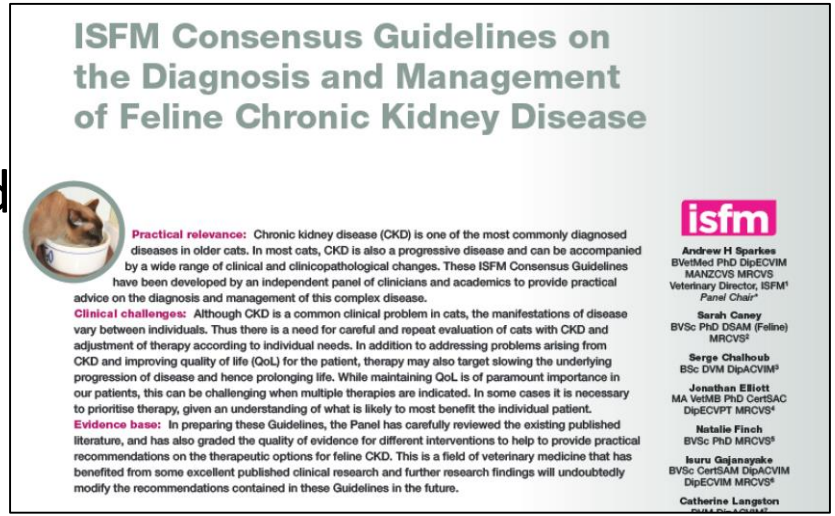
Aims of phosphate restriction

- Your patient will feel better
- Your patient will live longer
- Their renal disease is less likely to progress

- Current IRIS recommendations
  - Phosphate restriction recommended for all azotaemic CKD patients (i.e. Stages 2, 3 and 4)
  - Phosphate restriction recommended irrespective of patient's blood phosphate levels

Where is the evidence for this?

- Many publications looking at survival statistics for cats with CKD*
- Phosphate targets quoted are based on expert consensus (www.iris-kidney.com)



ISFM Consensus Guidelines on the Diagnosis and Management of Feline Chronic Kidney Disease

Practical relevance: Chronic kidney disease (CKD) is one of the most commonly diagnosed diseases in older cats. In most cats, CKD is also a progressive disease and can be accompanied by a wide range of clinical and clinicopathological changes. These ISFM Consensus Guidelines have been developed by an independent panel of clinicians and academics to provide practical advice on the diagnosis and management of this complex disease.

Clinical challenges: Although CKD is a common clinical problem in cats, the manifestations of disease vary between individuals. Thus there is a need for careful and repeat evaluation of cats with CKD and adjustment of therapy according to individual needs. In addition to addressing problems arising from CKD and improving quality of life (QoL) for the patient, therapy may also target slowing the underlying progression of disease and hence prolonging life. While maintaining QoL is of paramount importance in our patients, this can be challenging when multiple therapies are indicated. In some cases it is necessary to prioritise therapy, given an understanding of what is likely to most benefit the individual patient.

Evidence base: In preparing these Guidelines, the Panel has carefully reviewed the existing published literature, and has also graded the quality of evidence for different interventions to help to provide practical recommendations on the therapeutic options for feline CKD. This is a field of veterinary medicine that has benefited from some excellent published clinical research and further research findings will undoubtedly modify the recommendations contained in these Guidelines in the future.

isfm

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Catherine Langston

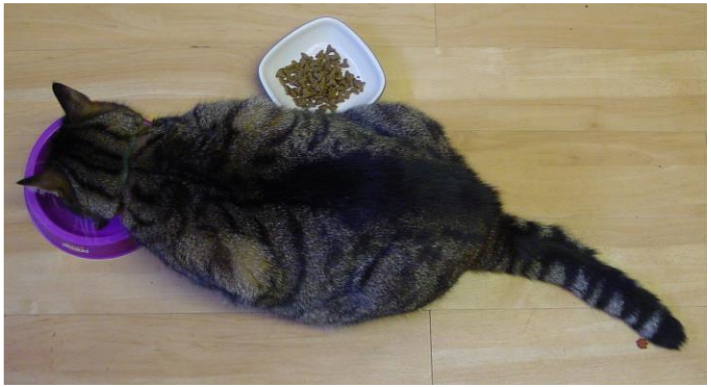
* Barber et al 1999; Elliott et al 2000; Ross et al 2006

How do we achieve phosphate restriction?

- (Maintain normal hydration)
- Phosphate restricted diet
  - Therapeutic renal diet
  - Home prepared diet
  - Senior diets
  - Avoid high phosphate treats (dairy, meat)
- Oral phosphate binders
  - In combination with renal diet or normal food

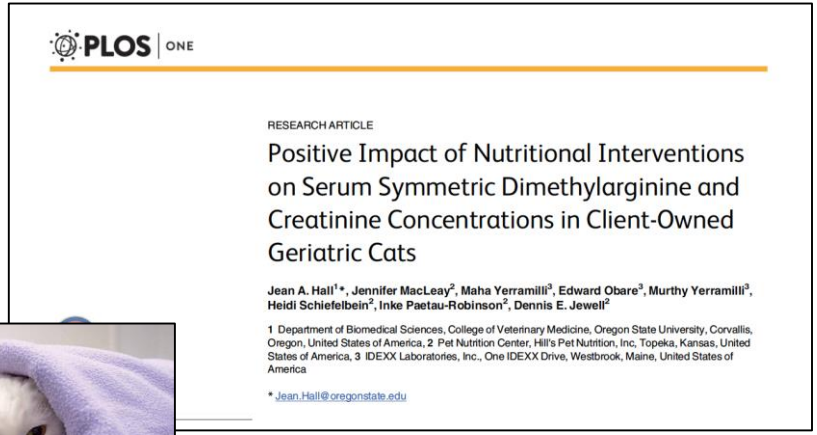
Therapeutic renal diets

- THE single most effective treatment for cats with CKD: proven to prolong life by 2-3 times AND improve quality of life
  - Recommended for all cats in IRIS Stages 2, 3 and 4 CKD
  - Recommended for IRIS Stage 1 cats if proteinuric or hyperphosphataemic
- Many key characteristics including
  - Palatable, high calorie
  - High quality protein, restricted levels
  - Phosphate restricted
  - Non acidifying
  - Potassium & vitamins added, low sodium



What changes (if any) are indicated for CKD IRIS Stage 1 cats?

- Owner education
- Monitoring
- Diet change?
  - Standard therapeutic renal diet?
  - Early renal diet?
  - Senior diet?



PLOS ONE

RESEARCH ARTICLE

Positive Impact of Nutritional Interventions on Serum Symmetric Dimethylarginine and Creatinine Concentrations in Client-Owned Geriatric Cats

Jean A. Hall[1]*, Jennifer MacLeay[2], Maha Yerramilli[3], Edward Obare[3], Murthy Yerramilli[3], Heidi Schiefelbein[2], Inke Paetau-Robinson[2], Dennis E. Jewell[2]

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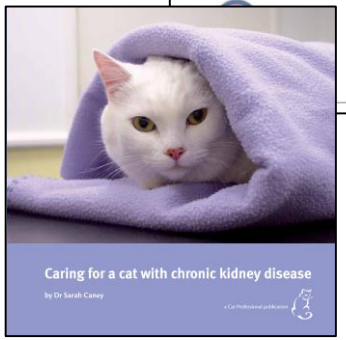
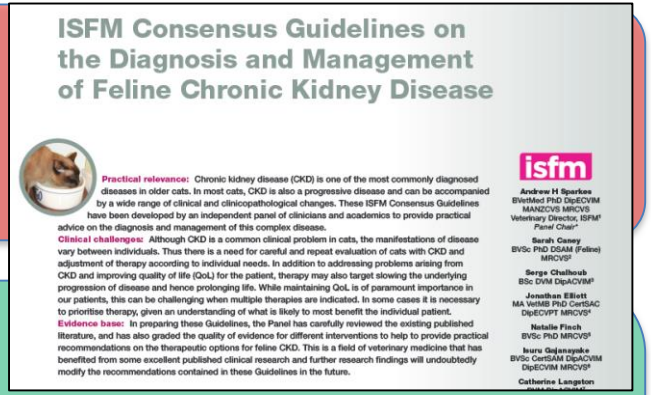


Therapeutic renal diets

Quality of evidence as an intervention

- Increased longevity: GOOD
- Improved QoL: GOOD



ISFM Consensus Guidelines on the Diagnosis and Management of Feline Chronic Kidney Disease

isfm

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Panel recommendations

- The Panel strongly recommends the feeding of a commercial renal diet in all cats with azotaemic (stages 2-4) CKD. Where possible this diet should be fed exclusively…Feeding a wet rather than dry diet…also recommended…..

ISFM Consensus Guidelines on the Diagnosis and Management of Feline CKD, 2016

What level of dietary compliance is realistic?

- Research studies relating to feline CKD (1999 – 2006)
  - 46 – 94%
- Owners of cats with CKD (2015, 2016)
  - 51% - 66%
- Pet owner surveys: compliance to therapeutic diets in general (2006, 2009)
  - 12 – 21%

Successful transition to a renal diet

- Make it a long-term aim – gradual transition (4-8 weeks+)
- Introduce early (IRIS Stage 2)
- Persevere, don’t be daunted
- Emphasise benefits in longevity and QoL
- Give medications separately e.g. in palatable treat
- Don’t introduce when the cat is in hospital or is clinically unwell
- Home prepared diets: possible with input from a vet nutritionist
- Wet preferred to dry
- Renal > home prepared > senior > standard commercial cat food
- Consider feeding tube support

Know the power of your recommendation!

‘Where a veterinary recommendation to feed a therapeutic renal diet (TRD) had been received, 72% owners reported feeding a TRD as a component of their cat’s diet versus 7% of owners who had not received a veterinary recommendation to feed a therapeutic renal diet’

Original Article

An online survey of dietary and phosphate binder practices of owners of cats with chronic kidney disease

Sarah MA Caney

Abstract

Objectives: The objective of this study was to learn about owner experiences of chronic kidney disease (CKD), focusing on use of therapeutic renal diets (TRDs) and intestinal phosphate binders (IPBs).

Methods: An online survey was promoted to UK-based cat owners.

Results: In total, 859 owners participated. Most cats (n = 620; 72.18%) had two or more clinical signs at the time of their CKD diagnosis. Most common were polydipsia (n = 462; 53.78%) and weight loss (n = 426; 49.59%). In 94 cats (10.94%) CKD was only diagnosed as a result of wellness screening. In total, 371 participants (43.19%) reported that their cat’s blood pressure had been measured; 100 of these (26.95% of those where blood pressure had been measured) subsequently received anti-hypertensive medication. In total, 90.80% of all participating owners had received a recommendation to feed a TRD. Five hundred and seventy-one owners (66.47%) reported that they were feeding a TRD as a component of their cat’s diet. The most common reason for not feeding a TRD was that the cat did not like it (n = 123; 59.13%). Where a veterinary recommendation to feed a TRD had been received, 564 owners (72.31%) reported feeding a TRD as a component of their cat’s diet vs seven owners (7.04%) who had not received a veterinary recommendation to feed a TRD. IPBs had been recommended to 321 owners (37.81%) and for 72 owners (8.38%) the recommendation came from a source other than a veterinary professional. Where used, IPBs were commonly added to a TRD (n = 136; 49.28%) and were generally accepted within 4 weeks (n = 176; 73.86%).

Conclusions and relevance: Awareness of TRDs was high but much lower for IPBs. A veterinary recommendation to feed a TRD was associated with higher compliance.

Accepted: 9 September 2016

Survey of 859 UK owners of cats with CKD, published online JFMS 2016

What is the role of phosphate binders?

- P restriction recommended for IRIS Stage 2, 3 and 4 cats
- Indications
  - Cats/owners where transition to a renal diet not possible
  - Where phosphate levels remain ‘high’ in spite of renal diet
- Oral phosphate binders
  - In combination with renal diet/normal cat food
  - Bind P present in the diet, bound P excreted in the faeces
  - Check P levels after 6-8 weeks and adjust dose, add second agent if needed
  - (avoid sucralfate: V+, constipation, lack of efficacy)
    Quimby & Lappin 2016 JAAHA 52:8-12

Owner top tips for acceptance of IPB

(859 owners of cats with CKD)

- Start with a low dose and then increase
- Mix thoroughly with food
- Use wet food if possible
- Use empty gelatin capsules to dose the cat
- Syringe down the phosphate binder
- Add to dry food in a bag and leave overnight
- Use strong tasting food to disguise the binder
- Warm the food
- Use a low dose several times a day
- Add to the food when the cat is not looking!

Use of phosphate binders

Quality of evidence as an intervention

- Increased longevity: No data, likely to be GOOD
- Improved QoL: No data

Panel recommendations

- If a renal diet cannot be used, or is insufficient to control serum phosphate, phosphate binders should be used (given with food), the response monitored, and the dose adjusted accordingly …adopting the IRIS target phosphate concentrations

ISFM Consensus Guidelines on the Diagnosis and Management of Feline CKD, 2016

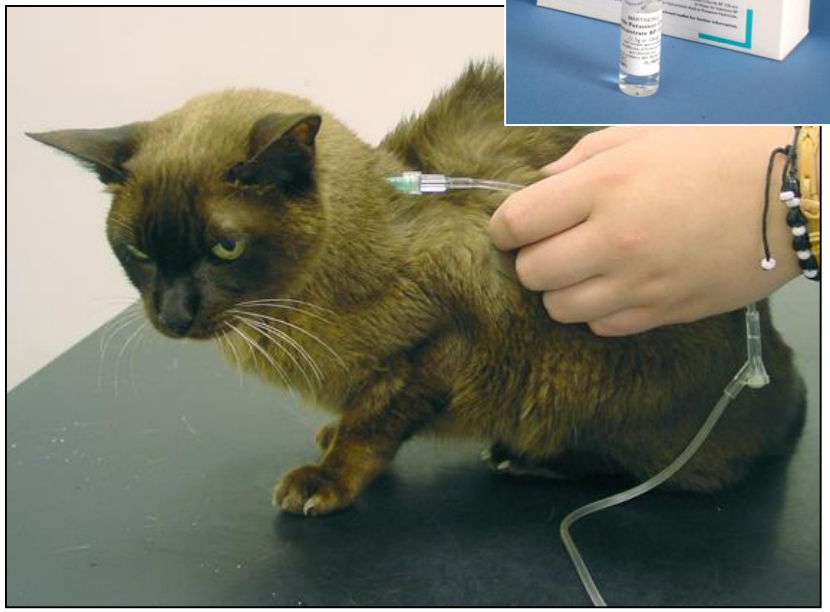
Inappetence, nausea and vomiting

- Consider possible causes:
  - ‘Uraemia’
  - Hypergastrinaemia
  - Dehydration
  - Electrolyte disturbances e.g. hypokalaemia
  - Anaemia
  - Chronic pain

- Find and fix whatever you can
- General advice for the owner
- Symptomatic options
- Don’t introduce new diet when ‘unwell’
- More aggressive support if needed

Find and fix whatever you can

- Correct dehydration
- Correct electrolyte imbalances
- Support anaemia where present
- Treat nausea and vomiting
  - Maropitant (1 mg/kg q24h)
  - Mirtazapine (1-2 mg/cat q48h)
- Is analgesia required (e.g. osteoarthritis)
  - e.g. meloxicam, buprenorphine
- Other options?
  - e.g. B12 supplementation



Managing inappetence, nausea & vomiting

Quality of evidence as an intervention

- Increased longevity: No data
- Improved QoL: Likely to be GOOD if cat symptomatic

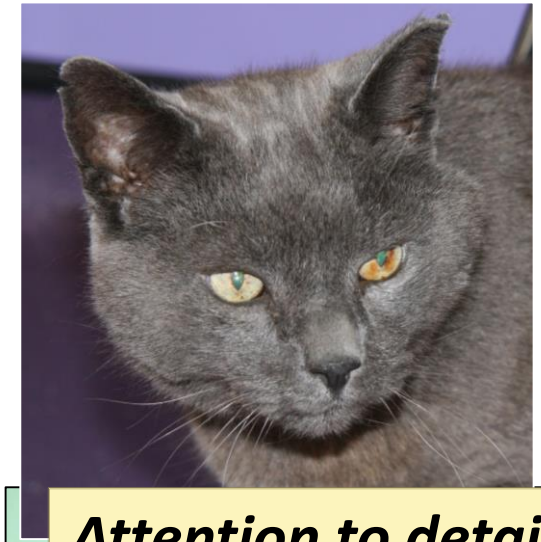
Panel recommendations

- Vomiting should be actively managed…and nausea always be considered as a potential contributory cause in cats with inappetence…centrally acting antiemetics likely to be most valuable and mirtazapine may have additional benefits…..

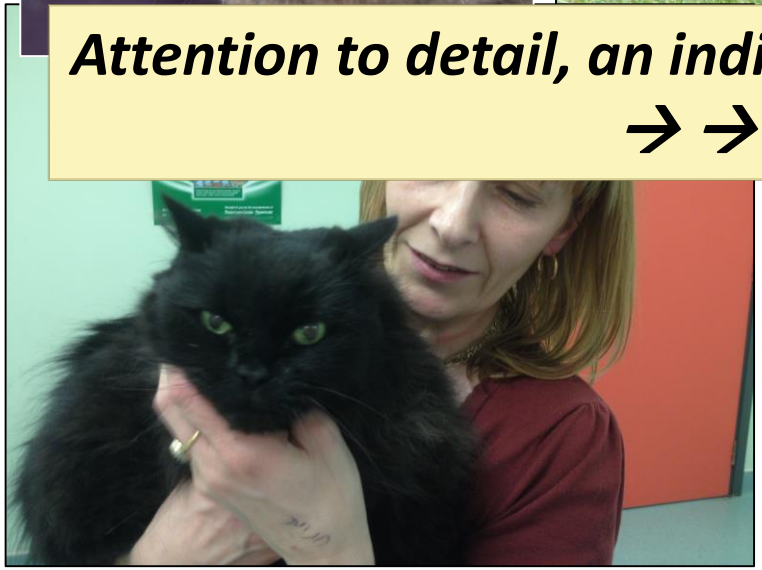
  ISFM Consensus Guidelines on the Diagnosis and Management of Feline CKD, 2016

Appetite support: tips for owners

- Offer food little and often
  - Remove if not eaten within 1-2 hours
  - Buffet not recommended
- Choice of bowl type
  - Metal/glass/china
  - Wide, shallow
- Bowl location
  - Quiet, away from other resources
- Room temperature or slightly warmer
- Try popular foods
  - Chicken, fish, prawns…
- Nursing tactics
  - Sit with the cat, groom, hand feed
- Elderly cats
  - Raise the food bowl
  - Mash the food
- Others
  - ? Catnip
  - Avoid stressful events with feeding
  - Avoid items toxic to cats e.g. onion



Attention to detail, an individualised approach and dedicated carer → → → optimal outcome



Summary: key points

- Slowing progression of disease
  - Phosphate restriction
    - Key target for all azotaemic patients
    - Achieved through using renal diet and/or phosphate binders
    - Use the IRIS target ranges for phosphate levels
  - Consider RAAS suppression
    - Prioritise for proteinuric patients
- Symptomatic support improves quality of life

Case study - Sula

- Signalment: 12y FN DSH
- Referring VS history
  - Healthy weight around 4.5 kg, some dental disease in the past
  - Feb and Oct 2016: senior health checks: all OK, SBP 138 mmHg, USG 1.045
  - Jan and July 2017: senior health check: USG 1.035, bloods OK, weight 4.6 kg
    - Dental July 2018
  - Aug 2018: USG 1.035, creatinine ⇧, weight 4.5 kg, therapeutic renal diet prescribed

Case study - Sula

- Presenting history Jan 2019
  - Sula's appetite has reduced and she is now rapidly losing weight
    - Oct 2018: weight 4.2 kg
    - Dec 2018: weight 3.85 kg
    - Jan 2019: weight 3.7 kg
      (compared to her healthy weight, Sula has lost 18% of her bodyweight)
  - Sula prefers wet food to dry but even her appetite for wet food is poor
  - Waxing and waning loose faeces reported
  - Renal parameters stable, IRIS Stage 2-3 CKD, non proteinuric and non hypertensive, phosphate 1.6, mild hypercalcaemia (2.96 mmol/l)

Case study - Sula

- What's a sensible approach?
  - Detailed assessment (physical exam, lab work, renal imaging) to make sure we find as many reasons as possible for the poor appetite
  - Reassess calcium, ionized calcium
  - 'Find and fix' as many things as possible
    - Complications from CKD
      - Dehydration, electrolyte disturbances (K+), anaemia, pyelonephritis…
    - Other causes of poor appetite?
      - Chronic pain (dental disease, osteoarthritis?), other illnesses?

Case study - Sula

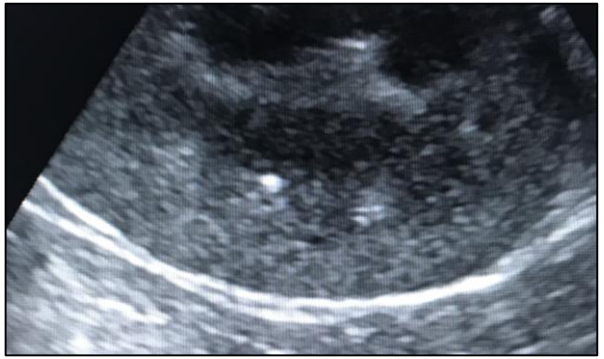
- What if appetite remains poor in spite of this….?
  - Symptomatic options?
    - Appetite stimulants e.g. mirtazapine: 1-2 mg per cat every 48 hours ?
    - Anti-emetic e.g. maropitant: 1 mg every 24 hours ?
    - Nursing care and TLC from owners
    - Nutritional assessment: calorie dense foods
    - Tube feeding?

Case study - Sula

- What happened?
  - Sula's owners keen to proceed with investigations
  - EPOC calcium analyser out of slides…decided to await these before completing investigations (ionized calcium test)
  - Mirtazapine 1 mg PO EOD prescribed with advice on nursing care and support of appetite, phosphate binder supplied for use with non TRD food
  - Progress report (phone, 1 week later): improvements seen, owners happy with initial progress

Case study - Sula

- Reviewed Sula 3 weeks after first appointment
  - Physical exam: kidneys a little small, 0.45 kg bodyweight gained in 3 weeks!
    - Blood results: SDMA 21, Creatinine 231, Phosphate 1.7, Potassium 3.4
    - B12, folate, SpecFPL: all normal
    - Ionised calcium normal, T4 24, USG 1.028, UPC 0.1
    - Imaging: Left kidney very small, some mineralisation, both kidneys had reduced corticomedullary definition. Some mild diffuse thickening of small intestine



Case study - Sula

- What's our assessment?
  - Poor appetite consistent with IRIS Stage 2-3 CKD
  - No further complications at this point
  - Cause of loose faeces not determined: ? IBD, dietary, neoplasia ?
  - Excellent response to symptomatic support of CKD
- Initial plan
  - Continue with supportive approach, monitor progress

Case study - Sula

- Treatment plan
  - Potassium supplement (Kaminox)
  - Phosphate binder (Renate)
  - Continued appetite support (mirtazapine)
  - Good progress but not keen on tablets
  - Transdermal mirtazapine discussed
    - No licensed preparation available in the UK but has been studied in the USA (healthy cats and cats with CKD)

Transdermal mirtazapine

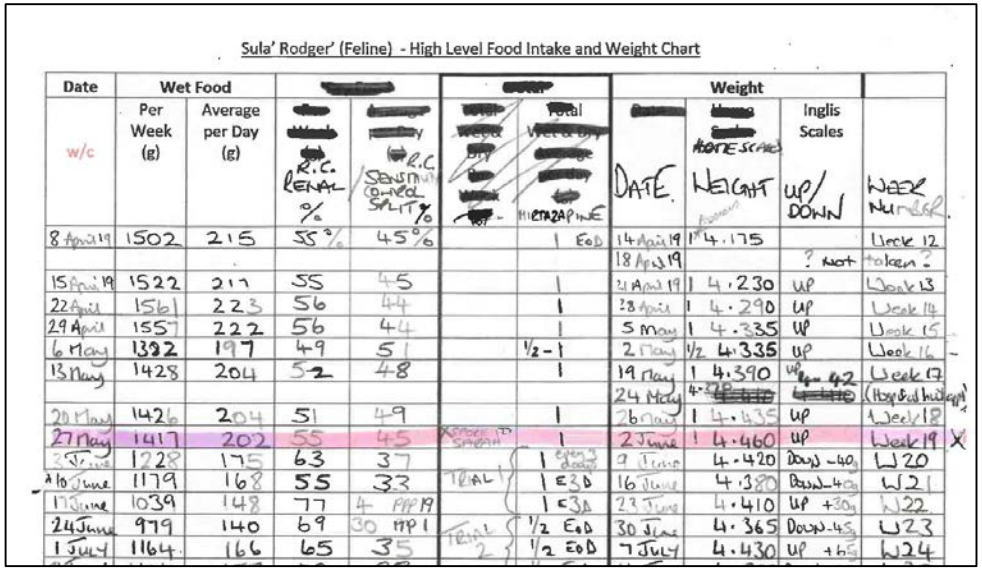
- Assessment of compounded transdermal mirtazapine as an appetite stimulant in cats with chronic kidney disease. Quimby et al 2019, JFMS online
  - Study 1, 9 client owned cats with IRIS Stage 2 or 3 CKD
    - 3.75 mg TD mirtazapine or placebo TD EOD for 3 weeks; 4 day washout then crossed over to alternate treatment
  - Study 2, 10 client owned cats with IRIS Stage 2 or 3 CKD
    - 1.88 mg TD mirtazapine or placebo TD EOD for 3 weeks then crossed over
  - Statistically significant increase in appetite, food consumption and weight with both. No significant difference in activity/vocalization between groups although some cats had increased vocalization

Transdermal mirtazapine

- Current treatment recommendations
  - 2 mg/cat starting dose **(same as oral dose)**
  - EOD treatment for cats with CKD
  - Use licensed product where available
  - Reduce dose if side-effects seen

Case study - Sula

- Follow-up
  - Remained on oral mirtazapine (2 mg eod)
  - Compliance to TRD greatly improved
  - May 2019: 4.4 kg
  - Owners great at recording and sharing data on her appetite and weight measurements at home…



Sula' Rodger' (Feline) - High Level Food Intake and Weight Chart

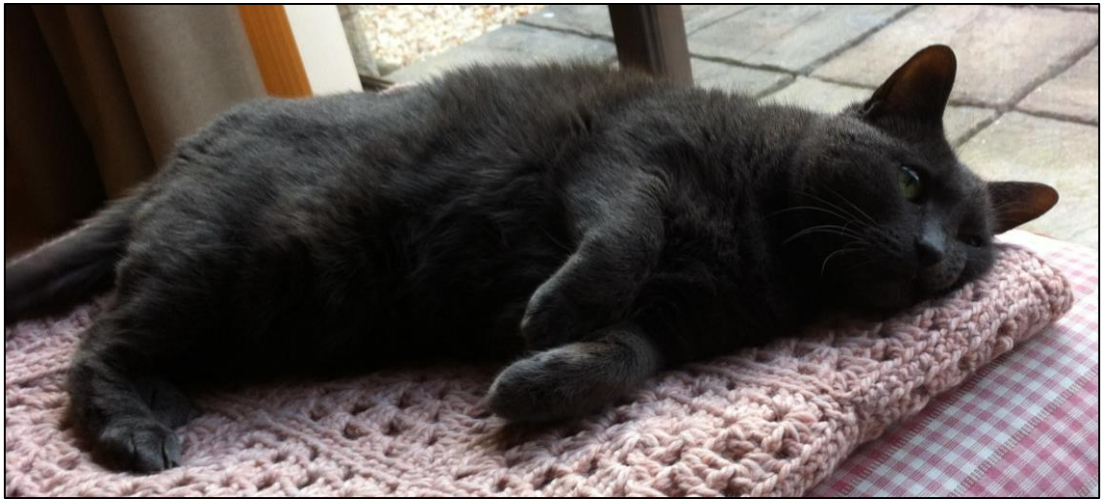
Date	Wet Food		[redacted]		[redacted]		Weight			
w/c	Per Week (g)	Average per Day (g)	[redacted] R.C. RENAL %	[redacted] R.C. SENSITIVITY CONTROL SPLIT %	[redacted]	[redacted] Total Wet & Dry MIRTAZAPINE	DATE	[redacted] HOME SCALES HEIGHT	Inglis Scales UP/DOWN	WEEK NUMBER
8 April 19	1502	215	55%	45%		1 EoD	14 April 19	1st 4.175		Week 12
							18 April 19		? not taken ?	
15 April 19	1522	217	55	45		1	21 April 19	1 4.230	UP	Week 13
22 April	1561	223	56	44		1	28 April	1 4.290	UP	Week 14
29 April	1557	222	56	44		1	5 May	1 4.335	UP	Week 15
6 May	1382	197	49	51		½-1	2 May	½ 4.335	UP	Week 16
13 May	1428	204	52	48		1	19 May	1 4.390	UP [redacted] 42	Week 17
							24 May	4.[redacted]	[redacted]	(Hospitalised with [redacted])
20 May	1426	204	51	49		1	26 May	1 4.435	UP	Week 18
27 May	1417	202	55	45	[redacted]	1	2 June	1 4.460	UP	Week 19 X
3 June	1228	175	63	37		1 (plus dose)	9 June	4.420	Down -40g	W20
10 June	1179	168	55	33	TRIAL 1	1 EOD	16 June	4.380	Down -40g	W21
17 June	1039	148	77	4 PPM		1 EOD	23 June	4.410	UP +30g	W22
24 June	979	140	69	30 MPI	TRIAL 2	½ EoD	30 June	4.365	Down -45g	W23
1 July	1164	166	65	35		½ EoD	7 July	4.430	UP +65g	W24

Case study - Sula

- Outcome
  - Last update Jan 2020 and Sula continues to remain stable and doing well
    - SDMA 27, creatinine 228, phosphate 1.5, potassium 4.5, USG 1.028
    - Continued soft stool have resulted in some dietary ‘tweaks’ – RC sensitivity + RC renal combination currently

Case study - Sula

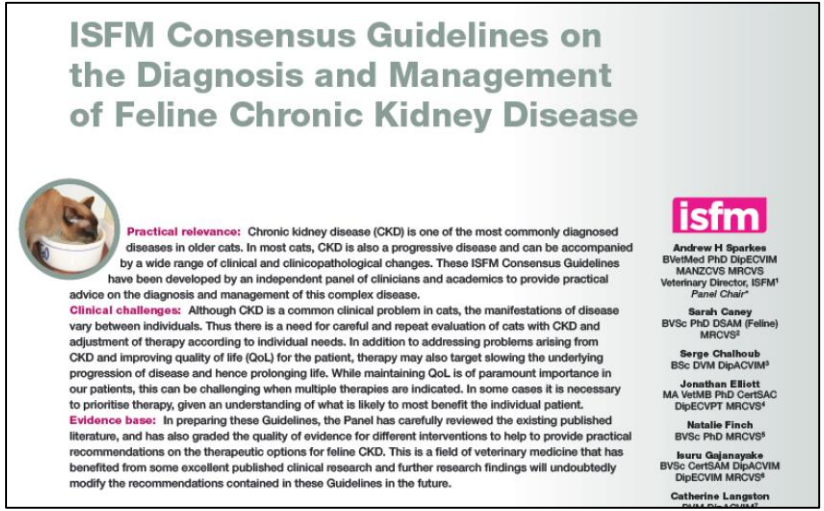
- Main lesson from Sula…
  - Supportive treatments can make a massive difference in some cases



Useful resources

www.rcvsknowledge.org/QIResources

Bit.ly/WebinarQI



ISFM Consensus Guidelines on the Diagnosis and Management of Feline Chronic Kidney Disease

Practical relevance: Chronic kidney disease (CKD) is one of the most commonly diagnosed diseases in older cats. In most cats, CKD is also a progressive disease and can be accompanied by a wide range of clinical and clinicopathological changes. These ISFM Consensus Guidelines have been developed by an independent panel of clinicians and academics to provide practical advice on the diagnosis and management of this complex disease.

Clinical challenges: Although CKD is a common clinical problem in cats, the manifestations of disease vary between individuals. Thus there is a need for careful and repeat evaluation of cats with CKD and adjustment of therapy according to individual needs. In addition to addressing problems arising from CKD and improving quality of life (QoL) for the patient, therapy may also target slowing the underlying progression of disease and hence prolonging life. While maintaining QoL is of paramount importance in our patients, this can be challenging when multiple therapies are indicated. In some cases it is necessary to prioritise therapy, given an understanding of what is likely to most benefit the individual patient.

Evidence base: In preparing these Guidelines, the Panel has carefully reviewed the existing published literature, and has also graded the quality of evidence for different interventions to help to provide practical recommendations on the therapeutic options for feline CKD. This is a field of veterinary medicine that has benefited from some excellent published clinical research and further research findings will undoubtedly modify the recommendations contained in these Guidelines in the future.

isfm

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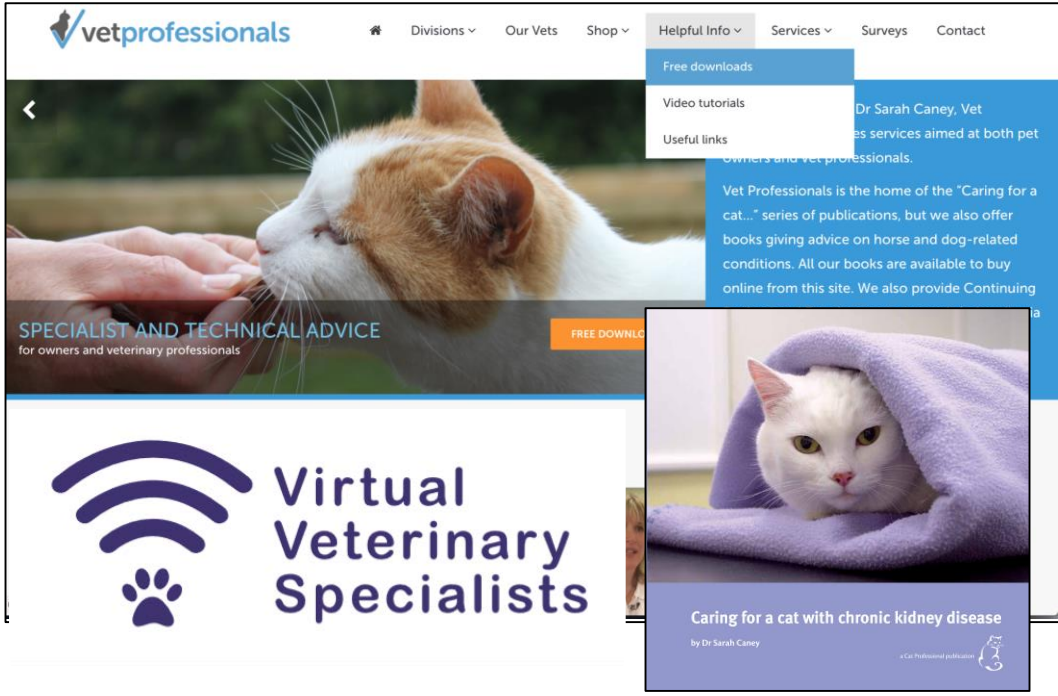

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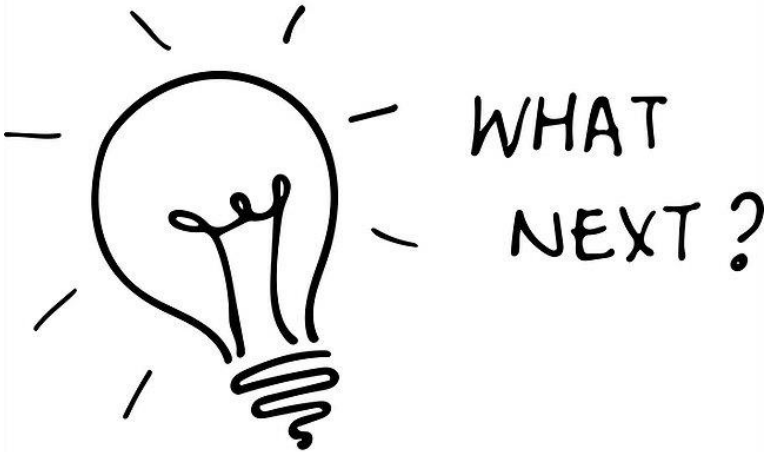
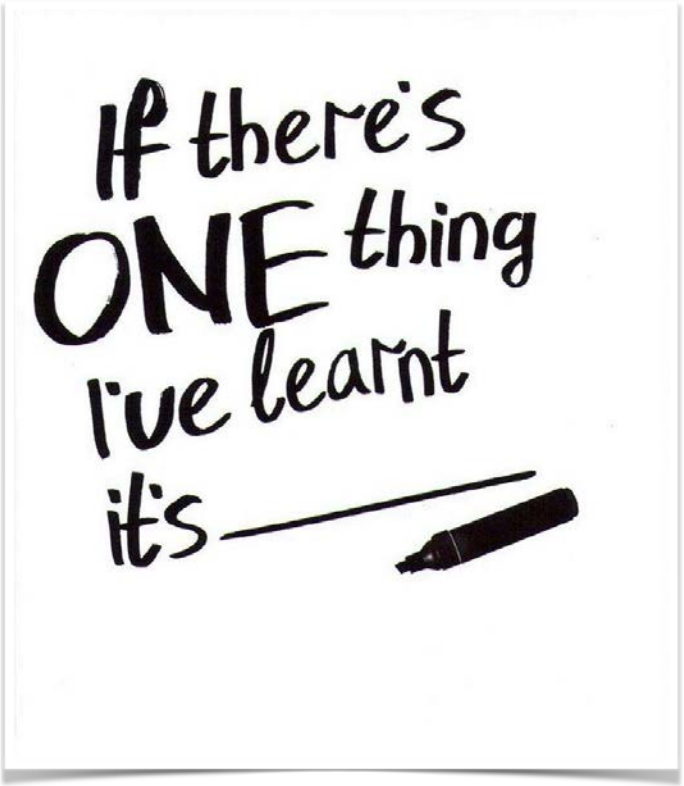
Over to Paul….


WHAT
NEXT ?

Good CPD

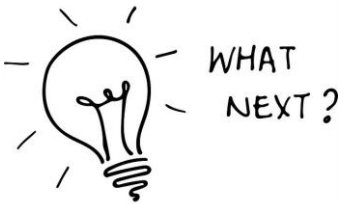
- It is not just what you hear…….. it is what you ***do*** as a result of what you hear.


If there's
ONE thing
I've learnt
it's

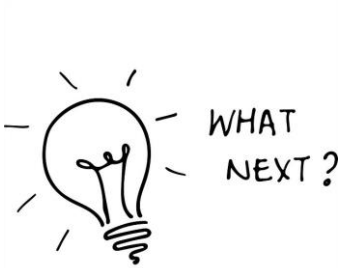
Aims of phosphate restriction

- Your patient will feel better
- Your patient will live longer
- Their renal disease is less likely to progress

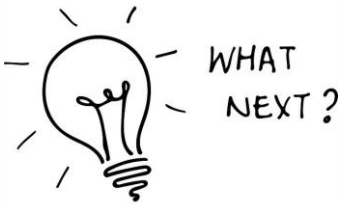
- Current IRIS recommendations
  - Phosphate restriction recommended for all azotaemic CKD patients (i.e. Stages 2, 3 and 4)
  - Phosphate restriction recommended irrespective of patient's blood phosphate levels



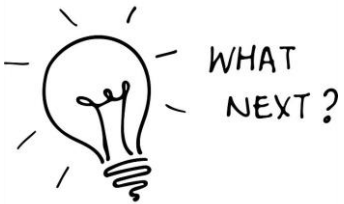
I have learned that phosphate restriction is very important in the management of renal disease.



What will I do differently when I go back into practice?

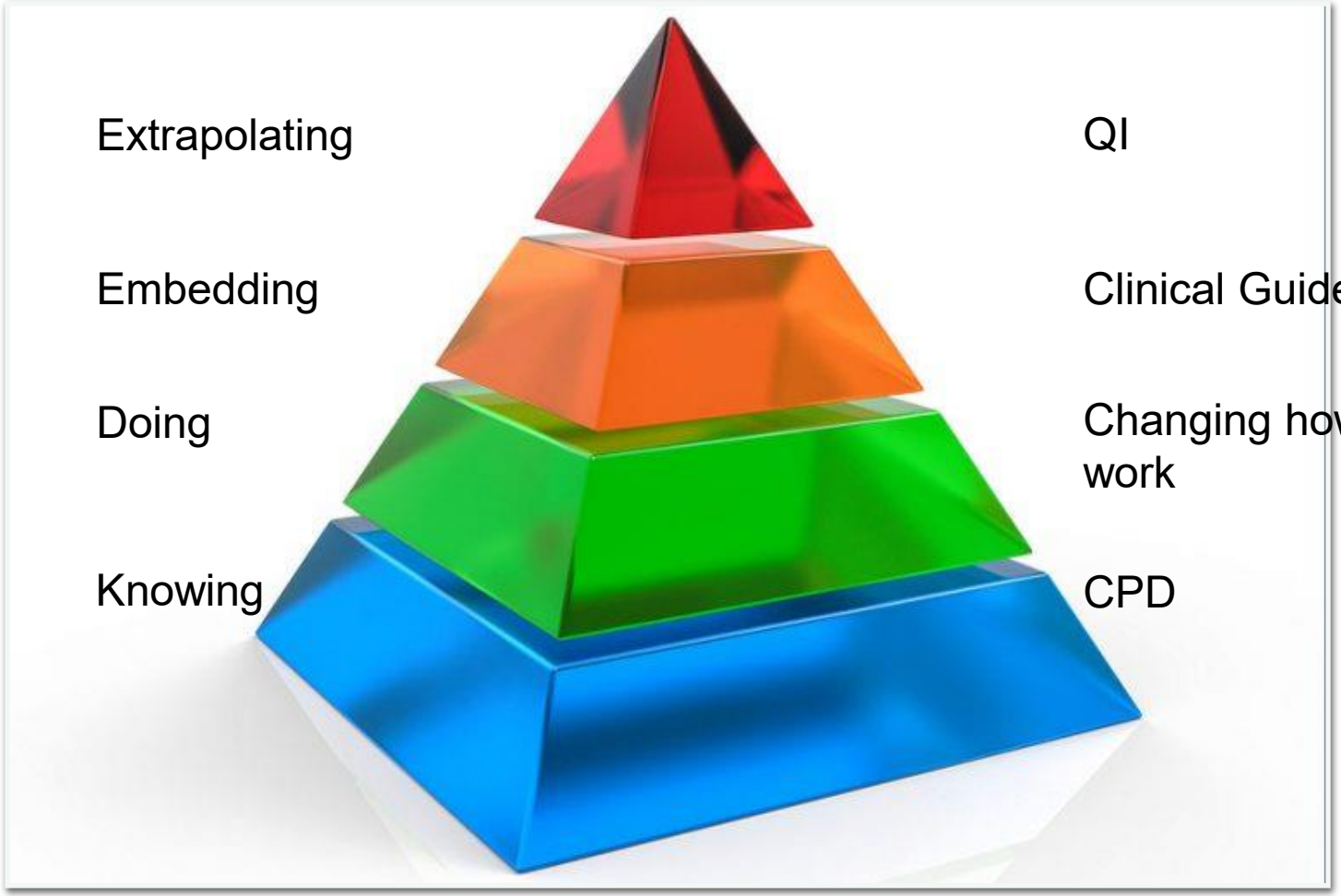


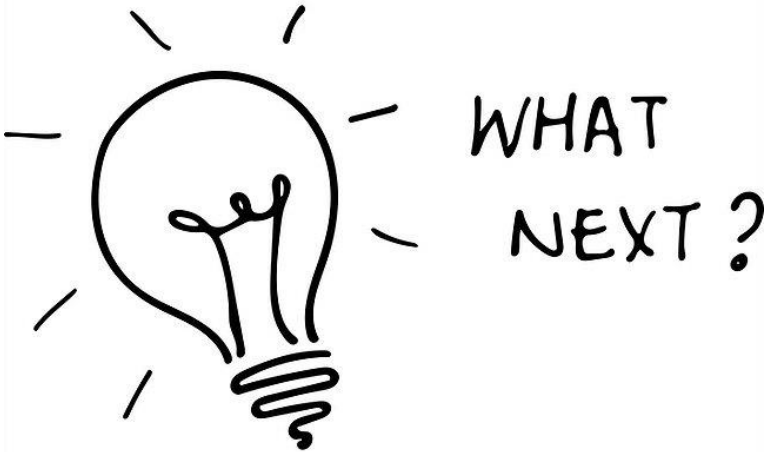
I am going to recommend renal diets for all my renal patients and explain the benefits to my clients.



But this CPD is important - and expensive… Is there anything else I can do?

The CPD Pyramid




WHAT
NEXT ?

Why bother with a guideline?

Why do we feed a renal diet?

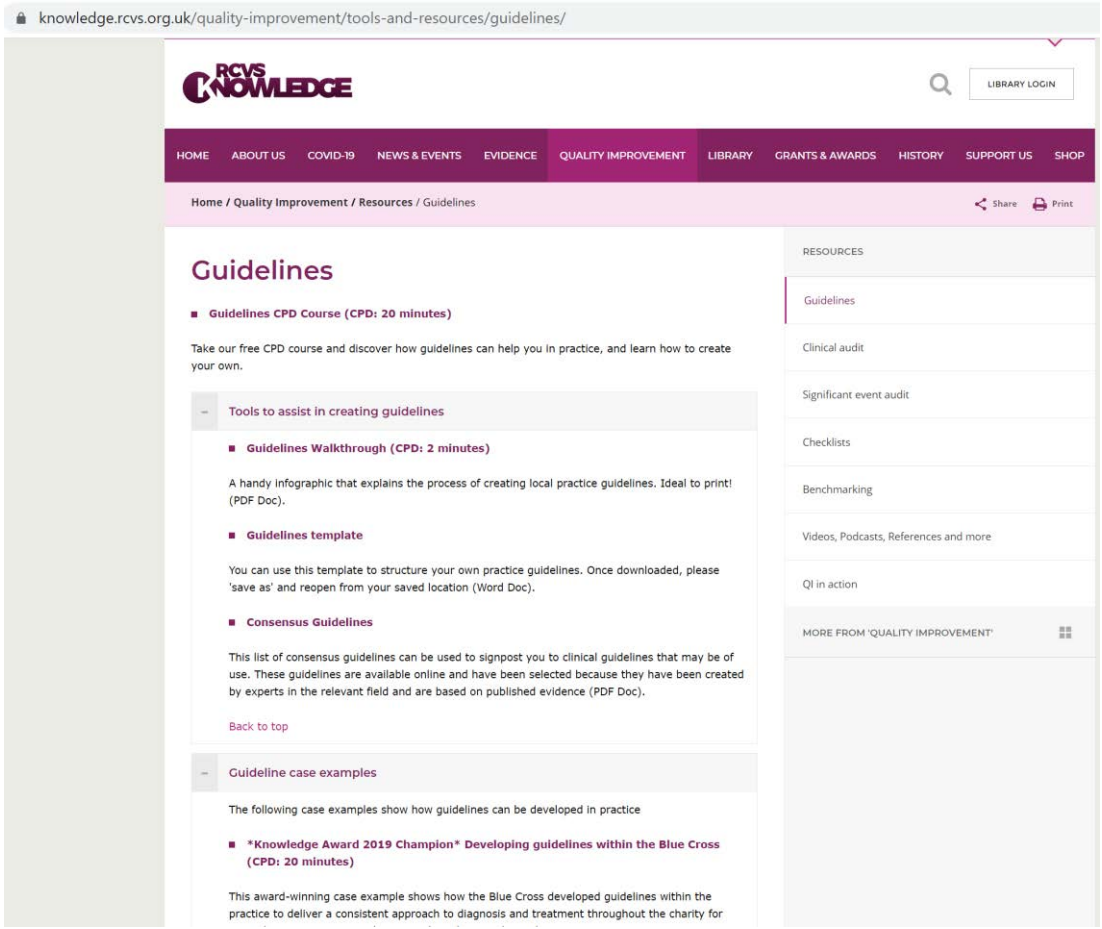
- I don’t know
- It is kinder to the kidneys
- It slows down the disease
- It has less protein
- It isn’t that tasty
- It is tastier than other foods
- I only know that you can’t feed it to sick cats if they are not eating.

Clinical Guidelines - Why bother?

- It’s a complex progressive disease.
  - Your patient will feel better
  - Your patient will live longer
  - Their renal disease is less likely to progress
- Source of reference.
- Guide to best practice.
- Increase in clinical standards.
- Should be reviewed and adjusted with changing opinion.

How to write a guideline

- Pick a topic
- Gather a team and do some research
  - Our nurses are invaluable. Speak to the reception team.
  - Get ownership with a bottom up approach.
- Write the guideline - keep it simple. One that works for you
- Supply references
- Release it and ask for feedback
- Launch it with a review date
- Undertake a process audit



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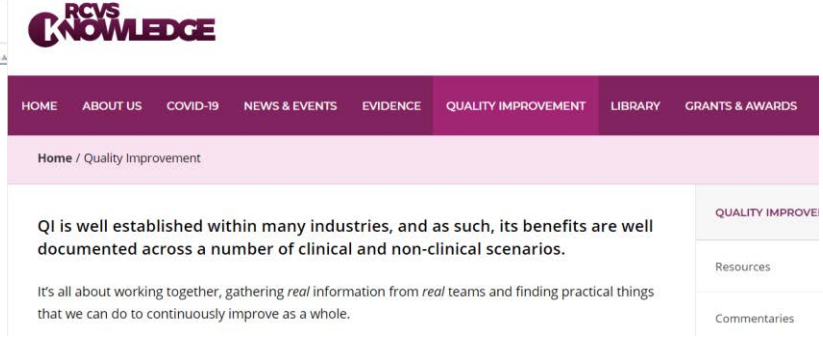

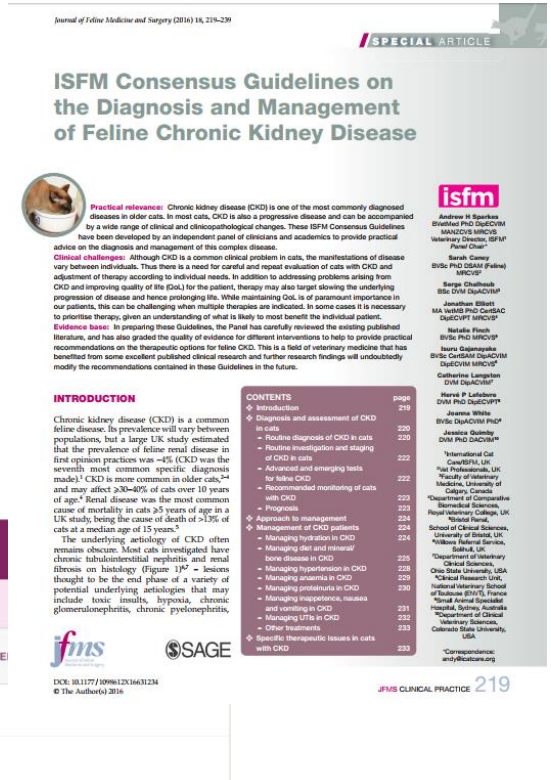

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How to write a guideline on….

- We have the key members of our team.
- We have done our research.
- Now let's create a guideline to fit *your practice!*

Does anyone know who this man is?

John Biggs

“Learning is constructed by what activities the students carry out; learning is about what they do, not about what we teachers do.”

Things I have learned…

- It’s important and it takes time. It needs to be protected and designated.
- Think about your team and clients values. Financial, better medicine, animal welfare.
- Buy in makes it work.
- Educate your team and give them examples.
- Undertake a process audit and ask for feedback.

Things to consider

- Keep it simple.
- Follow up with a phone call
- Create reminders
- Make diet an important question in your history taking
- Encourage your clients, give them options, know their values
- Educate them and explain the value of the diet.
- Ask open questions - “tell me about Fluffy’s diet” - and listen
- Audit your process - reflect and adjust. Consider benchmarking.

Owner top tips for acceptance of IPB

(859 owners of cats with CKD)

- Start with a low dose and then increase
- Mix thoroughly with food
- Use wet food if possible
- Use empty gelatin capsules to dose the cat
- Syringe down the phosphate binder
- Add to dry food in a bag and leave overnight
- Use strong tasting food to disguise the binder
- Warm the food
- Use a low dose several times a day
- Add to the food when the cat is not looking!

Appetite support: tips for owners

- Offer food little and often
  - Remove if not eaten within 1-2 hours
  - Buffet not recommended
- Choice of bowl type
  - Metal/glass/china
  - Wide, shallow
- Bowl location
  - Quiet, away from other resources
- Room temperature or slightly warmer
- Try popular foods
  - Chicken, fish, prawns…
- Nursing tactics
  - Sit with the cat, groom, hand feed
- Elderly cats
  - Raise the food bowl
  - Mash the food
- Others
  - ? Catnip
  - Avoid stressful events with feeding
  - Avoid items toxic to cats e.g. onion

How can QI improve what we do

A real life example

Guideline on heart murmurs

- If a murmur is noted in an older cat, always recommend an echo.
- Give a handout explaining SRR, the disease process and how an echo works

Process audit - heart murmurs in cats:

- 11 year old cat presented for a health check. On cardiac auscultation a grade 2/6 heart murmur was heard for the first time.

- Discussed heart murmur and recommended monitor SRR at home. Handout given. Owner to call in with SRR values. Owner is to consider an echo.

Process audit - heart murmurs in cats:

- 10 year old cat with murmur - No discussion or recommendation in the notes - handout given
- 12 year old cat in for health check - murmur detected - dental needed. No handout given
- 9 year old cat with breathing issue Grade 1 murmur - no handout or recommendation
- 19 year old cat - Heart murmur and gallop rhythm. No handout given. No discussion in clinical notes - why. Was owner not interested or was vet not interested?
- 2nd opinion 14 year old cat. Arrhythmia with dropped beat. Breathing issues. Was PTS
- Primary care vets: 4 months previously - mms pink and moist, crt<2s, no skin tent, chest/heart- heart murmur 2/6, abdo comf on palpation. Sore leg. Treated with pain relief

QI Resources

- Templates and walkthroughs to get you started
- Real case studies to download and read
- Insightful articles and opinion pieces
- QI podcasts you can listen to on the go

www.rcvsknowledge.org/QIResources

In Summary

- Gather a team and do some reading.
- Come up with a plan and give it a go.
- Reassess in a few months and tweak it.

- Good CPD is not defined by what you hear, but by what you do as a result of what you hear.

Further questions?

- www.rcvsknowledge.org/QIResources
- sarah@vetprofessionals.com
- Vet Professionals Ltd; www.vetprofessionals.com

Time to reflect

- What is your take home message for this session?
- Is there anything you are going to do differently as a result of this session? Why?

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