MedNut Mail

The How, When, Where, Which and Why of pharmacotnutrition

Templates for common clinical observations

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https://medicationsandnutrition.online

Commentary

From a practical, work efficiency perspective, many of the people we see are prescribed similar combinations of medications and so we find we're frequently repeating ourselves. For my clinical practice I created a file called Regular Notes, in which I templated much of the repeatable content with identifiers for the bits requiring change (people names, drug names, durations, etc). I then copied and pasted the relevant template(s) and personalised them accordingly – a practice that improved work efficiency as it meant not everything was being re-membered, re-thought and re-typed.

We are all at risk of being called to a Coronial Investigation into a matter relating to someone who has been in our Care. Our Notes need to -

- optimise the Care being provided, and
- inform the Medical and Nursing staff from both Care and educative aspects, as well as
- indicate our thinking at the time.
 We are always updating our knowledge so what was guiding our thinking at that point in time?

Many pharmaconutrition interactions are reflected in the blood test results so outlined are some common-to-Aged-Care templates -

- advisable to check plasma proteins (albumin, total proteins) as markers of nutritional status. The plasma proteins are the primary transporters for XXX of the prescribed drugs and hypoproteinaemia may alter their effects and expression of their side effects.
- low sodium likely exacerbated by XXX (drug); associated with increased risk of falls, and poor appetite.
- low potassium likely exacerbated by XXX drug.
- low Hb likely exacerbated by XXX (drug); associated with increased risk of falls, and poor appetite.
- marginal SIS (serum iron studies)

 has commenced iron intervention; there is minimal absorption of iron from iron tabs, which is further compounded by prescription of a proton pump inhibitor.
- low B12 intervention recommended. There is disagreement between pathology ranges and research findings with regard to appropriate B12 levels. Neuro-

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imaging research found a direct causal link between B12 status, damage to the brain, and consequent memory impairment; it also found increasing memory impairment as B12 levels dropped even whilst within currently defined acceptable ranges and that B12 interventions are effective once levels are less than 300 pmol/L. Currently prescribed **XXX** which negatively impacts B12 status.

 Low magnesium – currently prescribed XXX which negatively impacts magnesium status. There is now a recommendation that 0.80 mmol/L be the lower acceptable limit for magnesium.
 Women require 320 mg magnesium per day; [Men require 420 mg magnesium per day;] the Upper Limit for magnesium from non-food sources is 350 mg elemental magnesium per day; however there are side effects from magnesium interventions that provide 350+ mg elemental magnesium/day from non-food sources. Advisable to check magnesium levels and if still marginal then review current magnesium intervention and consider an intervention that provides about 300 mg elemental magnesium per day.

As a consequence of these nowreadily-available templates will you commence a cheatsheet/file to record your commonly applied observations?

Conclusions

Remembering, rethinking, and rewriting similar text on a regular dayto-day basis is quite timeconsuming. Templating commonly used observations and identifying the modifiable bits can result in reduced time doing paperwork.

Case study

Medical History with Nutritional Aspect

Amputation		Constipation		Dysphagia	MND	Γ
Anaemia		CVA		Enteral Feed	MS	Γ
Arthritis		CVD		Falls	Osteoporosis	$\mathbf{\nabla}$
Cancer		Dementia		Fracture	PD	Γ
CCF		Dentures		Frailty	Pressure Area	Γ
Chest Infection		Depression		Gout	Renal	
COAD		DM Type 1		Hypertension	Ulcer	Г
Confusion		DM Type 2		Incontinent	UTI	Г
Food Allergies	atypical	chest pain				
Other:	GORD,	H pylori eradicato	on, anxiety			

Biochemistry with Pharmaconutritional Consequences

Na:	140	mmol/l	Hb:	123	g/L	Albumin:	35	g/L	BSL:		mmol/l
К:	4.1	mmol/l	Lymph:	1.3		Total Protein:	69	g/L	H6A1C:	8.5	
Urea:	4.4	mmol/l	MCV:	82	mmol/l	B12:		pmol/L 🧹	INR:		
Creatinine:	0.070	mmol/l	Zn:		umol/l	Folate:		nmol/L 🗸	TSH:		mIU/L
Other:	eGFR 75, vit D 30, eAG 10.9										

Medications That May Adversely Affect Nutritional Status

Drug	Vits + Mins	bpp >90%	N/V	C/D	Wt	Арр	Tist	Thir	Sal	Drlg	d m	Dys	BSL
DIABEX	(08:00, 17:00) B12		NV	D	↓	↓	◄					Г	
Donepezil 🗸		V	NV	CD	¥	Ļ						Γ	
Mirtazapine 🗸			Ν	D	↑	1							
OSTEVIT-D 🗸	(25 mcg/day)												
Risperidone 🗸		V	NV	С	↑				↑				
Saxagliptin 🗸	(08:00)		V									Γ	
							 				I	 	
Extra drug:													

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Comments - medication and nutrition impacts (direct and indirect) only

Whilst there is a low biochemical result - it is not seemingly related to pharmaconutrition.

Diabetes drugs

- metformin has a duration of 12 hours
- saxagliptin has a duration > 24 hours

Diabetes drugs coverage

 before breakfast BSLs - minimal, if any, coverage from previous morning's metformin; some coverage from previous mornings saxagliptin; minimal, if any, coverage from previous evening's metformin;

- before evening meal BSLs - minimal, if any, coverage from previous evening's metformin; covered by current morning's metformin and saxagliptin.

Diabex decreases B12 absorption and thiamine availability - there is now a recommendation for regular monitoring B12 levels ie at least annually, whilst metformin prescribed.

Metformin and thiamine may have similar structures which enables

metformin to be transported on many of the thiamine transporters.

Regular monitoring sodium levels recommended whilst mirtazepine prescribed.

Risperidone associated with increased risk of diabetes.

Staff advise Mrs AAY eats a good breakfast, and is a picky eater at midday and evening meals but overall eats well; they also commented she likes to graze. Staff also commented Mrs AAY is very resistive with her prescribed medicines.

Mrs AAY is a small, pale, slender lady who was sitting in the Day Room when we went to speak to her - she told us she eats well, sleeps well and does not feel upset in the tummy, and also that she does not go outside.

Four prescribed medications reduce thiamine availability – being donepezil, metformin, mirtazapine and risperidone.

What else would you include?

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