Clinical case 1

History

Mrs Z, 83-year-old patient, currently hospitalized for dehydration.

Two months ago, she received radiation therapy for squamous cell carcinoma of her right tonsil. She is currently fed by a nasogastric tube because of a severe mucositis.

No geriatric evaluation prior to treatment.

Antecedents: hypertension, colic neoplasia and right eye cataract.

Treatment: venlafaxin, propranolol and paracetamol.

The geriatric liaison team is called for help in the management of an apathetic delirium with several voluntary withdrawals of the nasogastric tube.

The day before our visit she developed a norovirus gastroenteritis.

Anamnesis & hetero-anamnesis

Difficult because of speaking difficulties secondary to mucositis and apathy (apathetic delirium on dehydration, sleep delay with nocturnal agitation, anemia and inflammatory syndrome).

The heteroanamnesis of the son-in-law tells us

- she was living alone independently,
- she was still driving,
- she did not seem to have cognitive problems,
- she had never been confused.
- social circle is limited because Mrs Z has only one disabled motor girl and it is therefore the son-in-law who makes himself available but he is still professionally active.

Before her radiotherapeutic treatment, she weighed 65 kilos. Now, she weighs only 57, the majority lost over the last 15 days.

What assessment do you propose?

Geriatric scales

- Water test : positive
- CIT : 0/28
- Clock : 7/7
- CAM : positive
- Mini GDS : 2/4
- MNA-SF : 6/14
- SEGA : 13/26
- Get Up Early : negative
- Up & Go : correct walking, without technical assistance, without deviation, control of the seat

Based on the opinion of radiotherapists, mucositis, treated by laser, should be resolved within 3 weeks maximum and there is therefore no need for gastrostomy.

Oto-rhinolaryngology evaluation shows loss of laryngeal sensitivity and hypotonia with false roads.

According to the specialists advices and your geriatric assessment, do you agree with their suggestions and what do you propose ?

For our part, we proposed:

- Parenteral setting for the resolution of gastroenteritis.

- A gastrostomy because even if the mucositis does not last more than 3 weeks, a supplement of calories will be essential to fight against the nutritional deficit.

- Treatment in revalidation for logopedic and nutritional recovery and adaptation of the home for the management of enteral feeding.

- A follow-up in Geriatric Day Hospital.

History

♀Z came in Geriatric Day Hospital after two months.

She stayed 1 month in hospital revalidation and went back home with nurse 2x/d, helper for activities1x/wk, physio 3x/wk, logopedist 3x/wk.

You note :

- Denutrition : oral nutrition that remains difficult and still needs enteral tube. Weight loss continues (52kg). No dietary monitoring.

- Motor decline despite physio.

- Thymic decline.

What are you doing then ?

Clinical case 2

History (1/3)

♂P, retired doctor aged 82, coming with his wife.

History: hypertension, hypercholesterolemia and overweight (95 kg for 178 cm). The blood pressure is normalized by a calcium channel blocker and the cholesterol level by a statin.

He ceased all professional activity 4 years ago, leaving the presidency of the Association of Retired Doctors of his original discipline. He lives with his wife, devoted to his side and has an only son who works on an oil platform in Africa. He plays golf once a week and since one year, has spent a lot of time in front of the television.

His presentation is a little neglected with a defeated tie, stained with egg yolk, and the fly half-open. He walks with a cane. He arrives very smiling towards you and greets you with a "Hello Colleague. Super hospital and secretary is really hot! « .

History (2/3)

He is addressed for the exploration of isolated cervical lymphadenopathy, 3 cm in diameter, not painful and mobile.

To the question "Since when do you have this?

He replies, "*I don’t know. It was X, my former intern, who wanted me to come see you. But that's surely the teeth. Besides you would not have better than the Augmentin, it's been three months that I take and the ball is still there. Three months or more I don’t know. I have memory that flank, I don’t remember very well* ».

While you have sent the patient to an ECG in the nurses' ward, the wife asks you "*What's wrong? It's terrible, I can’t recognize him, and he says hard things sometimes!* ".

How do you answer this question ?

History 3/3

His wife is fixing the beginnings of the difficulties of memory to two years before. Her husband is no longer interested in anything. She finds that he is looking for his words and that he is irritable ("Ah chicks!" He says). She also says that he was mistaken this year in the writing of the tax return. He got angry with her when she wanted to correct the tax document. ("Besides, he is very irritable even if you see he often jokes").

He has lost weight (4kg in the last 2 months) and says "tired, it's antibiotics surely." He has been walking with a cane since falling down the stairs three weeks ago.

Somatic clinical examination is strictly normal outside a left systolic carotid murmur. Blood pressure is symmetrical at 130/85 without orthostatic hypotension.

How do you continue the clinical and paraclinical evaluation of this patient?

Points à aborder

- aborder les démences et le fait que le bon niveau du patient ait retardé le diagnostic

The histological examination of the cervical ganglion shows lymphomatous proliferation with large B cells. Extension assessment is negative.

The therapeutic decision is a chemotherapy combining: R-CHOP (Rituximab, Cyclophosphamid, Doxorubicine, Vincristin, Prednisone). The potential complications of this chemotherapy are pancytopenia, renal toxicity, cardiac toxicity, polyneuropathy, digestive disorders.

How to prevent the toxicities and their consequences in this case ?

What are the risks for chemotherapy?

- Cardiac toxicity of doxorubicine => cardiologic examination because of the vacular profile
- Kidney toxicity=> no CI to chemotherapy but delirium risk because of ionic disorders and kidney insufficency.
- PNP risk
- Let's remind that the patient is walking with an aid, he has fallen because of the dysexecutive syndroma.
- Amyotrophy and lost of weight
- Physiotherapy limited by cogntive profile….
- Pancytopenia risk and delirium because of anemia
- Febrile neutropenia and risk of delirium

8 days after the first chemotherapy, the patient went to the emergency room. He was in delirium. A diagnosis of febrile neutropenia was made.

Is it better to focus care at the hospital or at home?

Points à aborder

- Severity scores of neutropenia :

Caractéristiques	Points
Neutropénie fébrile sans ou avec peu de symptômes	5
Pas d'hypotension (pression systolique > 90 mm Hg)	5
Pas de maladie pulmonaire chronique obstructive	4
Tumeur solide ou tumeur hématologique sans infection fongique préalable	4
Pas de déshydratation nécessitant une perfusion	3
Neutropénie fébrile avec symptômes modérés	3
Patient non hospitalisé	3
Age < 60 ans	2

Faible risque de complications si score > 20

Klastersky *JCO* 2000

- Vu troubles cognitifs sous jacents, risque de delirium majoré en hospi avec perfusions => si possibilité de rester au domicile avec AB PO (faible fragilité), il faut privilégier ça.

The cure of febrile neutropenia and the prevention of recurrence allows the realization of the therapeutic protocol shortly in time. Lymphadenopathy has almost disappeared. On the eve of the sixth cure, he makes another fall responsible of low back violence.

A vertebral fracture D12 is demonstrated and a conservative treatment by corset is decided.

2 weeks later, patient remains very tired and still painful. He can barely move into his apartment and hardly goes from bed to chair in the dining room. You receive a phone call from his son (who is in Africa) : "*This is the disaster: my cousin has just called me. My mother just broke the neck of the femur!* ".

What can you do ?

Clinical case 3

Mrs C, 78 y,

Left mastectomy in september 2018 for non metastatic neoplasia.

- 1st lesion : ER 90% (oestrogen receptors), PR 10% (progesterone receptors), Ki67 30% (cellular proliferation – 30 = quick) and HER2 - (herceptine receptor for chimio).

- 2nd lesion : ER 100%, PR 85%, Ki67 5% (low evolutivity), HER2 2+.

The COM suggests adjuvant chemo, radiotherapy and hormonotherapy.

- 3 cures of FEC-75 (5-fluorouracil, epirubicin, cyclophosphamid) from 25/10 to 06/12.

- Treatment stopped because of grade 4 neutropenia

- Replaced by Taxotere every week with 9 cures from 27/12 to 21/02/2019.

- Mdical history : lacunae thalamo-mesencephalic in 2015, no sequelae ; diabetes NIR, HTA, macular degeneration.

- Treatment : Zanidip 10 1x, Preterax 5/1,25 1x, Metformax 850 1x, Eucreas 850/50 1x, Novonorm 1mg 3x, Asaflow 80 1x, Befact Forte 2x

- 27/02/2019 hospitalization for febrile neutropenia. Numerous falls during hospitalization.

What are the causes of falls and what do you need to know for diagnosis and intervention on the risk of fall in this case ?

Geriatric aspects

- Autonomous at home with a help once a week for cleaning and shopping
- Walks alone without help; no falls before
- Lost of weight and appetite,
- No cognitive disorder and good mood
- Son very available for help if necessary

Clinical aspects

- BP 110/80 mm Hg
- Cardiovascular and chest examinations normal
- Abdominal exam normal
- Neurological: no motor defect but hyporeflexia
- Skin normal
- Mouth normal

Complementary exams :

- Bio : malnutrition, inflammatory syndrome, normal kidney function, hypocalcemia, thyroïd tests correct, HbA1c 5%, vitamine D deficiency
- CT scan brain + angio carotids: diffuse cortico-sous-cortical atrophy, lacunae thalamo-mésencéphalic (not acute), supra aortic vascular atheroslerosis without significant stenosis.
- ECG : normal
- TT echo : no hypokinesia, LVEF normal

- Is there a potential iatrogenic cause to the falls?
- What are the secundary effects of chemotherapy agents?
- What do you think about the treatment of diabetes and HTA

FEC toxicity :

- Alopecia
- Pancytopenia
- Cardiotoxicity
- Nausea and vomitis

Taxane :

- Polyneuropathy
- Pancytopenia

A discuter

- Diabète sous ADO trop bien équilibré, probablement au prix d’hypoglycémies => il faut réduite le traitement et viser HbA1c 7,5%
- Diabète = potentielle PNP et chimio par taxane = risque de PNP => il faut faire un ENMG
- Valeurs tensionnelles trop strictes avec le traitement actuel => élaguer le traitement
- Rechercher une HO vu le diabète et l’atteinte dysautonome potentielle => mettre bas de classe 2 au besoin et en l’absence d’artériopathie
- Perte de poids récente qui favorise amyotrophie
- Atcd de DMLA
- Atcd d’AVC dont la symptomatologie peut se remanifester au vu du contexte septique

Clinical case 4

Mr GG, 76 years old

<u>Admitted to geriatric day hospital for preop CGA :</u> radical cysto-prostatectomy (scheduled 6 weeks later)

<u>History:</u>
- March 2018 : diagnose of urothelial carcinoma
- March – april 2018 : 2 endoscopic resections
- May 2018 : recurrence → indication of total cysto-prostatectomy

<u>Medical past:</u>
- HTA
- Hypercholesterolemia
- Diabetes type 2 Insulin-Requerant
- → Diabetic neuropathy and chronic renal insufficiency
- → Stage III lower limbs arteritis – femoro-popliteal bypass grafting G occluded (2016), persistent intermittent claudication - amputation 1st toe G - internal carotid occlusion D
- Severe pancreatitis, cephalic pancreatectomy, hemicolectomy (1990)
- Pleural tuberculosis (1960)

<u>Life habits:</u>

Widow, married with a younger wife, always present
Former military aviator
Autonomous for ADL, except a functional impairment due to arteritis, walking distance max 25m.
Moves with a crutch inside and a scooter outside
Stopped smoking 3 years ago (25 PY), drinks 1 glass of wine per day (was alcoholic)

Mr GG, 76 years old

Treatment : Amlodipine 10mg 1x - Lisinopril 5mg 1x - Fludex 2,5mg 1x - Lipitor 20mg 1x - Glucophage 850 mg 2x - Lantus 22UI matin – 40 UI le soir -Novorapid 17 UI matin – 41 UI midi – 41 UI soir

Physical exam : BP 11.5/6.5 cm Hg - HR 80 bpm - Weight : 95 kg - BMI 32.9 kg/m^2

Dyspnea NYHA III - Heart and lungs : hypoventilation

Abdominal obesity – multiple surgical scars

Arterial and venous insufficiency

Areflexia of lower limbs

Mr GG, 76 years old

Biology : Hb 14.6 g/dL – MCV 81 fl – urea 53 mg/dL – creat 1.3 mg/dL – ionogram 143/4.8/103/26 mmol/L – protein 72 g/L – Albumin 40 g/L – PAB 22 mg/dL – fasting glucose 199 mg/dL – HbA1c 8.4%.

CT thoraco-abdo : It measures about 62 mm long axis. Increase of upstream uretero-hydronephrosis with a ureter whose maximum diameter is estimated at 28 mm. Absence of free intra-abdominal fluid. Absence of intra- or retroperitoneal adenomegaly. Prostatic hypertrophy.

EFR : VEMS : 1.55 l (62% VP) – VEMS/CV (Thiffeneau) : 59% - TPC 4.6l (73% PV) – DLCO ml/min/mm Hg (45% PV)

ECG : RSR 72 bpm, BAV 1st degree, auricular extrasystoles.

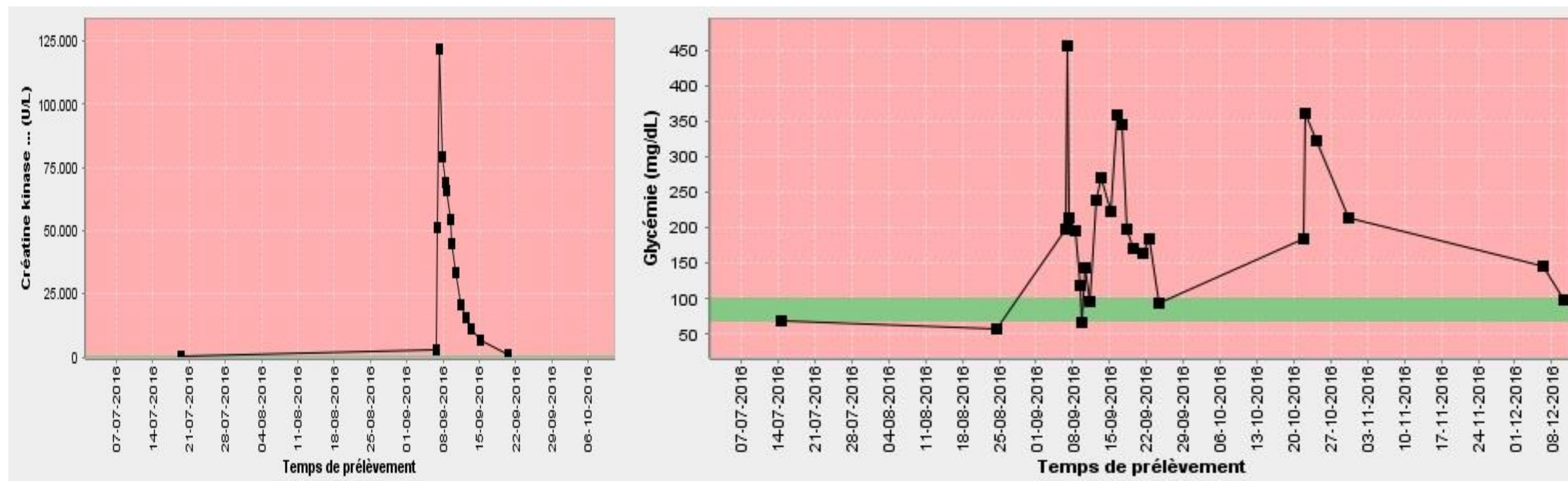
Cardiac echo : preserved LVEF, estimated at 55% - no ventricular hypertrophy, normal LV cinetism. Altered relaxation of LV.

CGA : Frailty score ISAR 3/6 –ASA score 3 - Katz 7/24 – Lawton 7/7 - MNA 20.5/30 – GDS 0/4 – MMSE 28/30 – WS 0.6 m/sec

Mr GG, 76 years old

<u>Post-op follow-up :</u>

On day 1 after surgery, the patient had a cardiogenic shocj and a severe rhabdomyolysis requiring hemodialysis in ICU.
He will be discharged from hospital to a rehabilitation centre after 1 month, with bedsores (sacrum and heels).
After 15 days, the patient is rehospitalized: he eats almost nothing since his intervention, is permanently bedridden, he has urinary and faecal incontinence. He has lost more than 20 kg since the intervention. He has also developed severe oropharyngeal dysphagia. The MNA-short form is at 6/14.



What happened to this patient?
What should have been anticipated before surgery?
How do you manage the patient when he returns to hospital?

Réponses possibles

- Corriger le diabète
- ? SNO préop? Cfr risque de dénutrition
- Préhabilitation : kiné, sevrage alcool

Intérêts : connaissent-ils le sd hypercatabolique? Doit-on donner des SNO préop? Faut-il un régime diabétique strict? Connaissent-ils la préhabilitation?

Réponses possibles

- **Etat hypercatabolique**
  - Corriger le diabète
  - ? SNO préop? Cfr risque de dénutrition
  - Préhabilitation : kiné, sevrage alcool
- **Recommandations :**
  - nutrition intensive post-op par entérale
  - Mobilisation +++ durant tout le séjour
  - …

Intérêts : connaissent-ils le sd hypercatabolique? Doit-on donner des SNO préop? Faut-il un régime diabétique strict? Connaissent-ils la préhabilitation? Envisageront-ils une NE d'emblée? Une mobilisation précoce?

Réponses possibles

- Etat hypercatabolique
  - Corriger le diabète
  - ? SNO préop? Cfr risque de dénutrition
  - Préhabilitation : kiné, sevrage alcool
- Recommandations :
  - Nutrition intensive post-op par voie entérale
  - Ok voie orale mais textures adaptées
  - Mobilisation +++ durant tout le séjour
  - Colostomie de décharge

Intérêts : connaissent-ils le sd hypercatabolique? Doit-on donner des SNO préop? Faut-il un régime diabétique strict? Connaissent-ils la préhabilitation? Quels types de SNO (spécifiques diabète? Escarres?)? Poursuivent-ils une nutrition orale? Quel type de