




SYGEHUS LILLEBÆLT
PATIENTEN FØRST


Choosing wisely – going from knowledge to implementation

JSRS 2026



Jakob Møller
Chief Physician of Department of Radiology
Lillebaelt Hospital – three sites

No conflicts of interest

Esteemed colleagues from the department

Professor
Søren Rafaelsen

Professor
Helle Precht

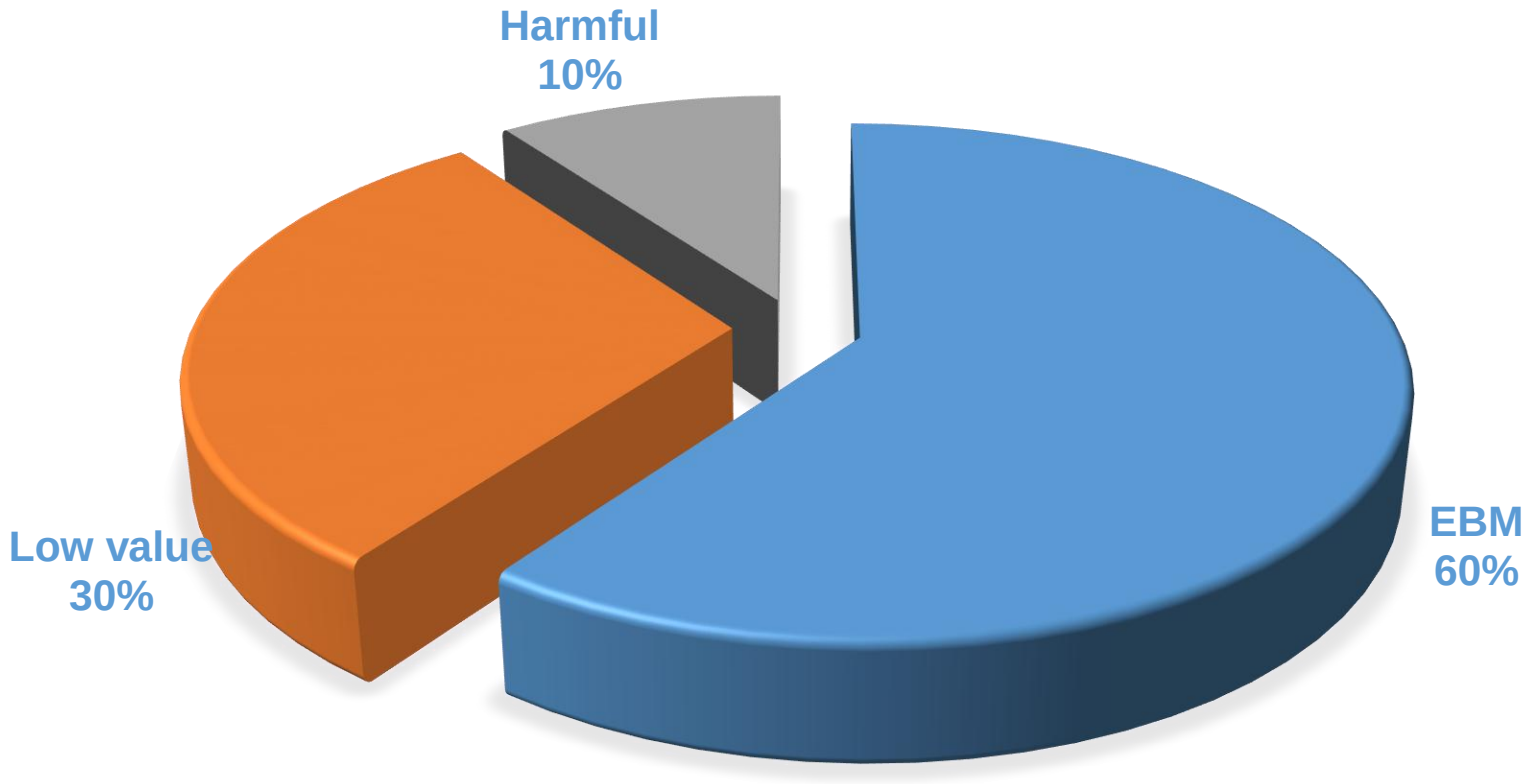
Agenda:

- Background – choosing wisely
- Better use of imaging of the spine – a regional project
- Handling incidental findings in our department

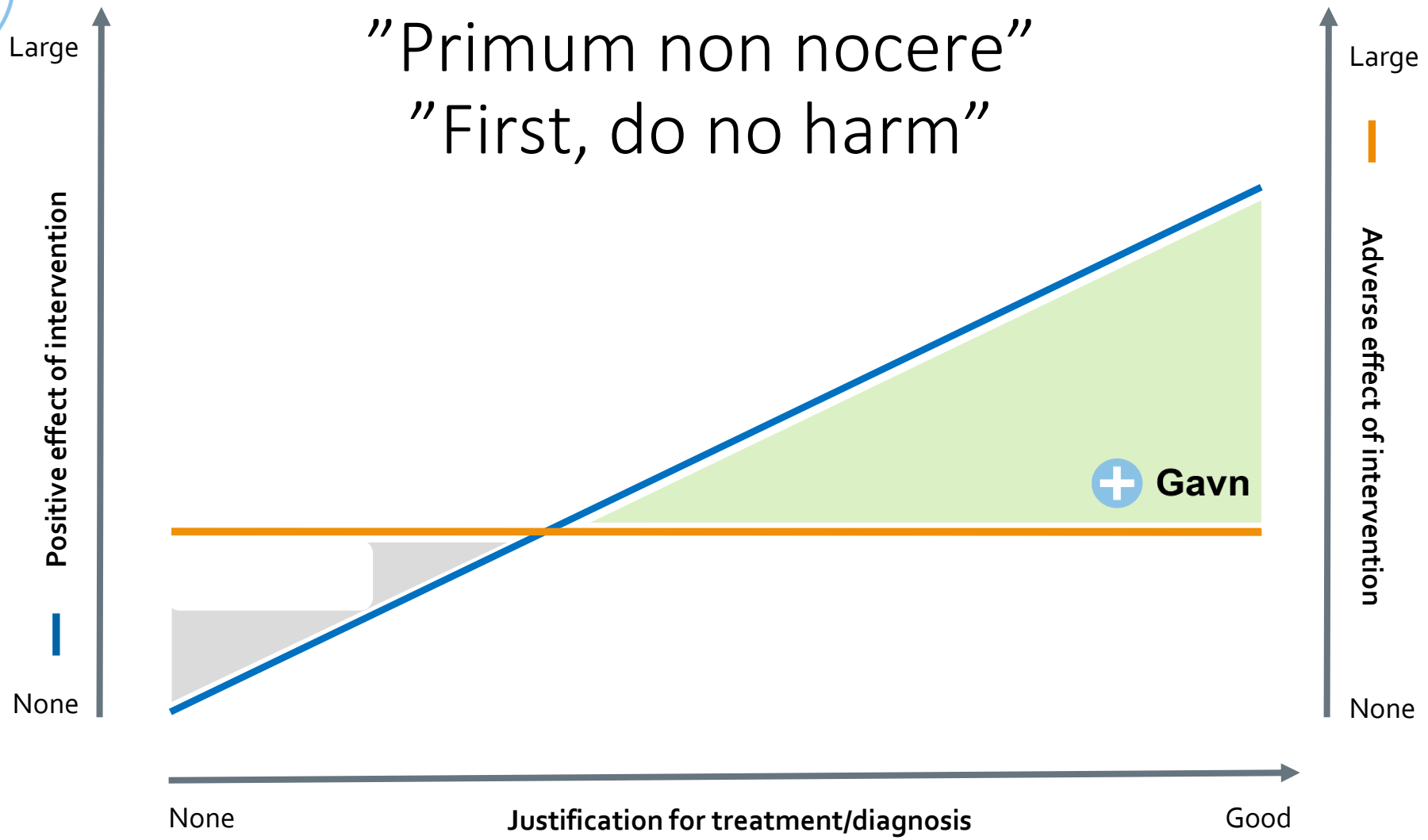
Other cases

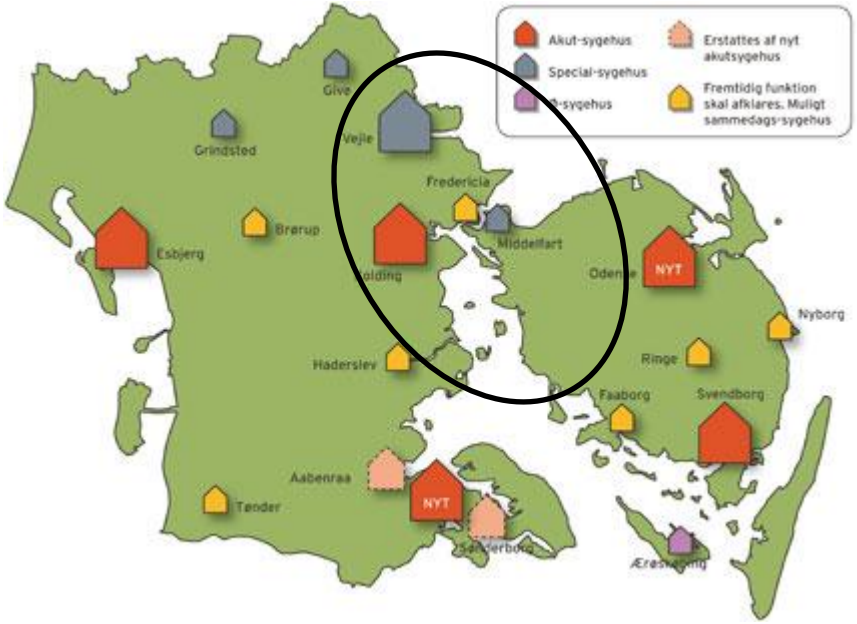
- Testicular microlithiasis
- Gall bladder polyps

Clinical activity



”Primum non nocere”
”First, do no harm”





Our department provides radiology for the center of the Region of Southern Denmark that handles degenerative disease of the spine.

FULL TEXT ARTICLE

Imaging strategies for low-back pain: systematic review and meta-analysis

Roger Chou Dr, Rongwei Fu PhD, John A Carrino MD and Richard A Deyo Prof

Lancet, The, 2009-02-07, Volume 373, Issue 9662, Pages 463-472, Copyright © 2009 Elsevier Ltd

"Lumbar imaging for low-back pain without indications of serious underlying conditions does not improve clinical outcomes."

The association between early MRI and length of disability in acute lower back pain: a systematic review and narrative synthesis

Bara A. Shraim, Muath A. Shraim, Ayman R. Ibrahim, Mohamed E. Elgamal, Basem Al-Omari & Mujahed Shraim

BMC Musculoskeletal Disorders **22**, Article number: 983 (2021) | Cite this article

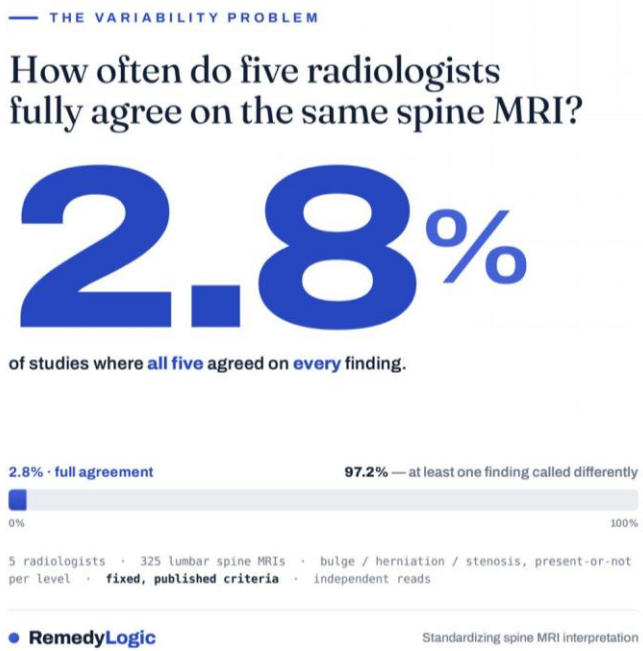
"Three retrospective cohort studies reported that the eMRI groups had a higher mean LOD than the no eMRI groups ranging from 9.4 days (95% CI 8.5, 10.2) to 13.7 days (95% CI 13.0, 14.5) at the end of 1-year follow-up period. The remaining studies reported that the eMRI groups had a higher hazard ratio of work disability ranging between 1.75 (95% CI 1.23, 2.50) and 3.57 (95% CI 2.33, 5.56) as compared to the no eMRI groups."

Andrej Rusakov · 2.
CEO & Founder at RemedyLogic - we're hir...
6 t ·

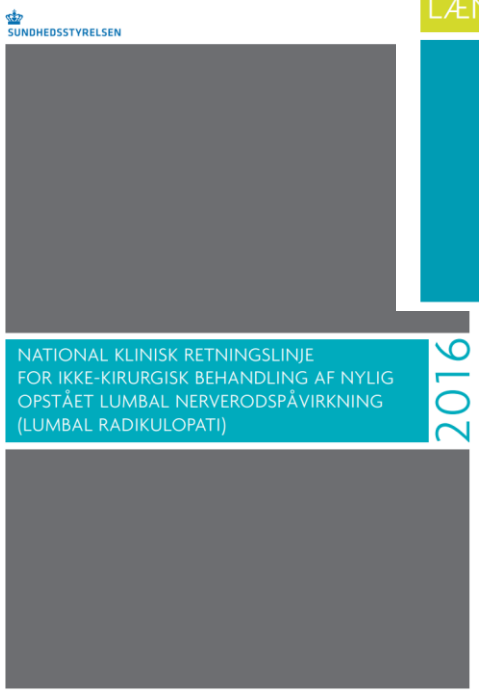
+ Følg

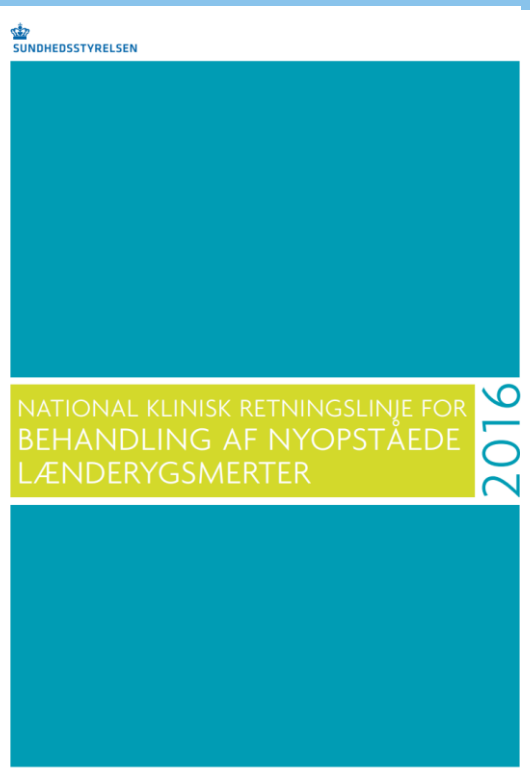
We gave five neuro radiologists the same 325 spine MRIs. They fully agreed 2.8% of the time....mere

Vis oversættelse



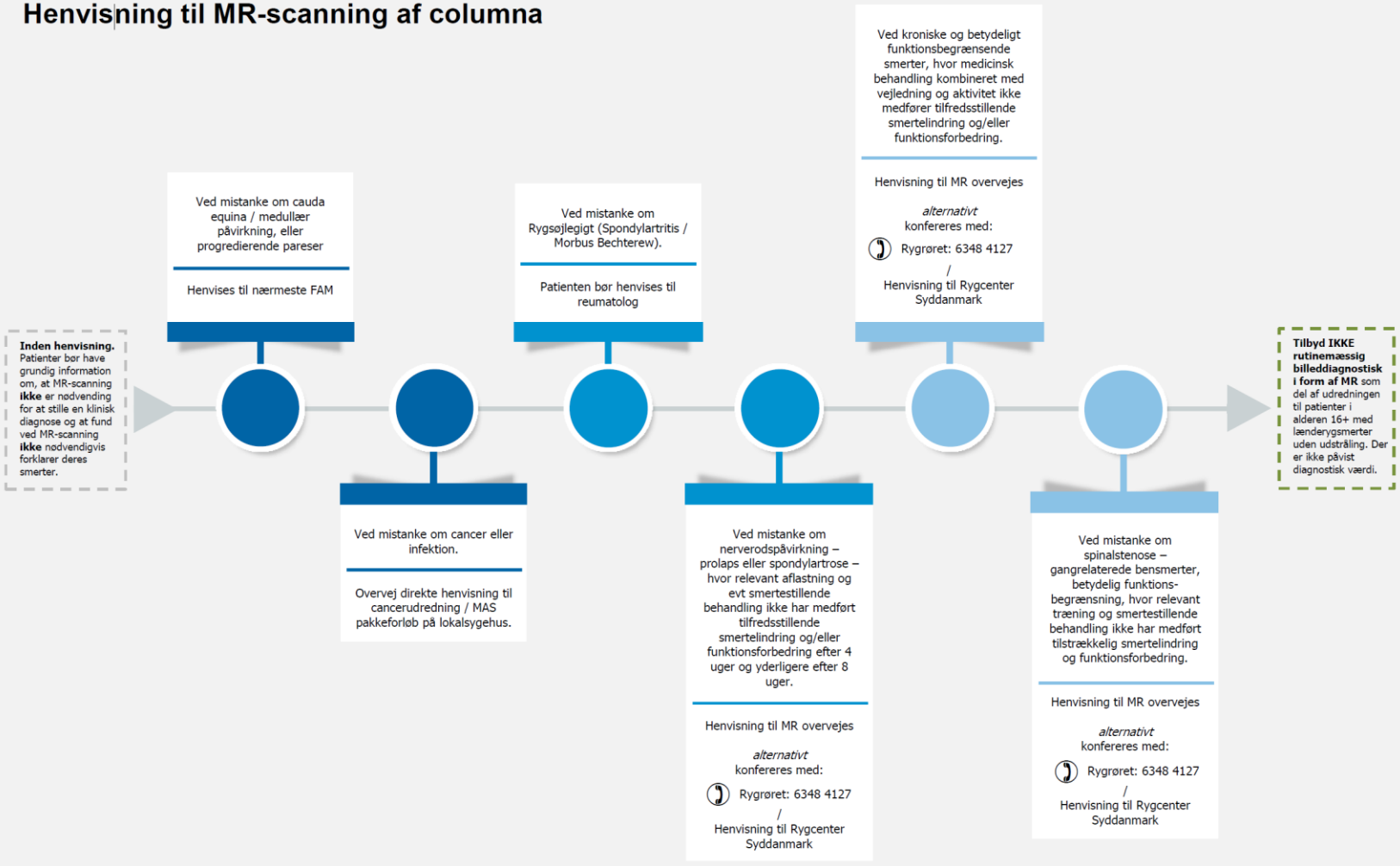
National Guidelines





”Sundhedsstyrelsen”:
The Danish Health Authority

Henvisning til MR-scanning af columna



Rygcenter Syddanmark
- en del af Sygehus Lillebælt

Ved mistanke om kompressionsfraktur foreslås røntgen af det relevante område. Derudover er der ikke rutinemæssig indikation for røntgen af columna.

Region of Southern Denmark

Lillebaelt Hospital

2019:

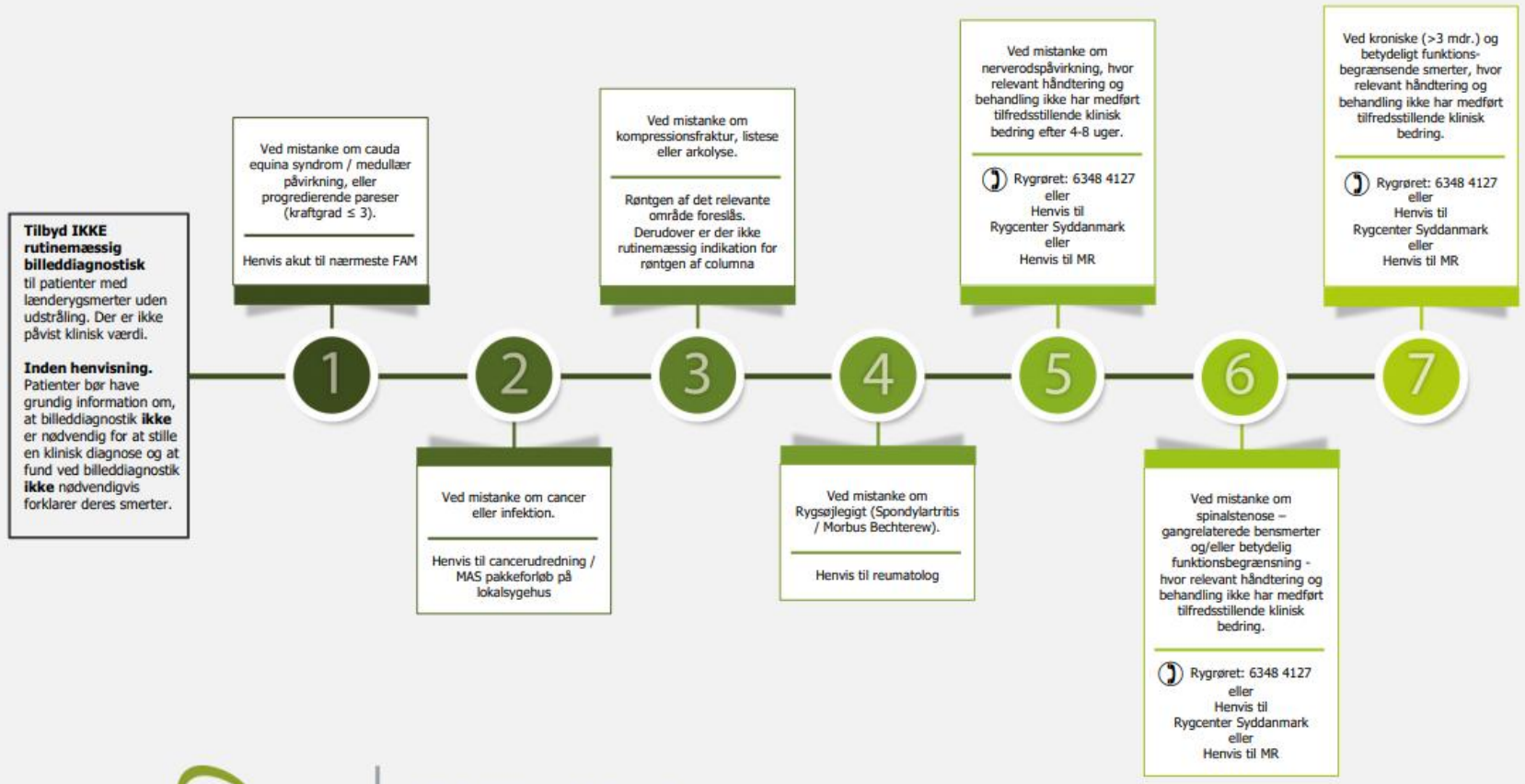
- Different criteria for imaging of the spine in the different departments of radiology in the region
- An attempt was made to handle these differerences by standardize the criteria for performing radiological examinations – intially only MRI, but later also X-ray
- To make consensus for the use of the national guidelines

- Working group(!):
  - ✓ The Chief Physicians of the 5 radiological departsments of the region
  - ✓ Representatives of the general practitioners (family doctors) of the region
  - ✓ Representatives of the physiotherapists of the region
  - ✓ Representatives of the chiropractors of the region
  - ✓ Representatives of the spine surgical departments of the region (neurosurgery and orthopedic surgery)

Billeddiagnostik af columna

Retningslinje for Region Syddanmark, der kan fraviges ud fra klinisk vurdering.

Version 2.0 // Oktober 2019



Region Syddanmark

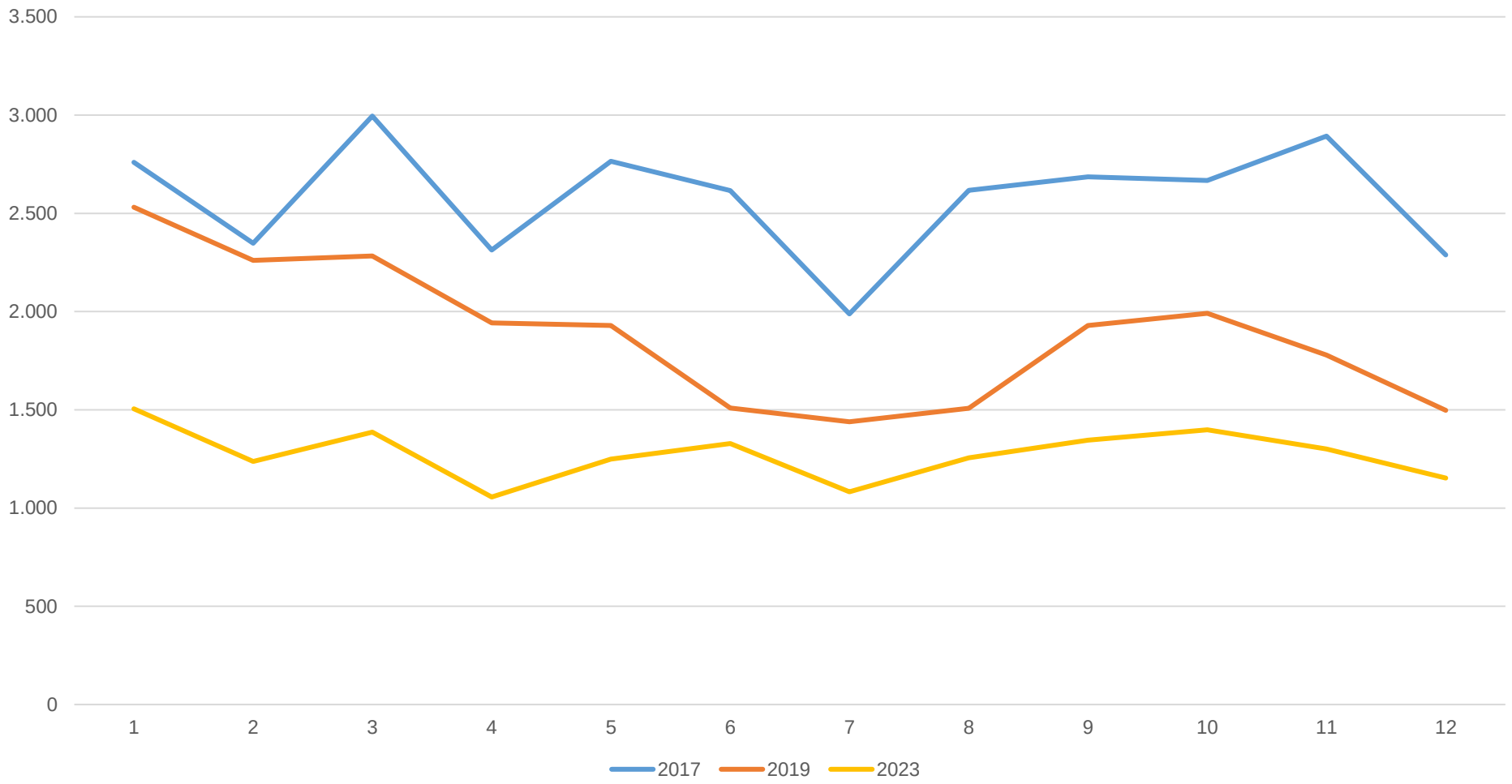
Udarbejdet i samarbejde mellem

Praksiskonsulenter,
Røntgen og Skanning, SHS
Radiologisk afdeling, OUH
Røntgenafdelingerne, SLB
Radiologisk og Nuklearmedicinsk afdeling, SVS
Neurokirurgisk afdeling U, OUH
Ortopædkirurgisk afdeling O, OUH
og Rygcenter Syddanmark

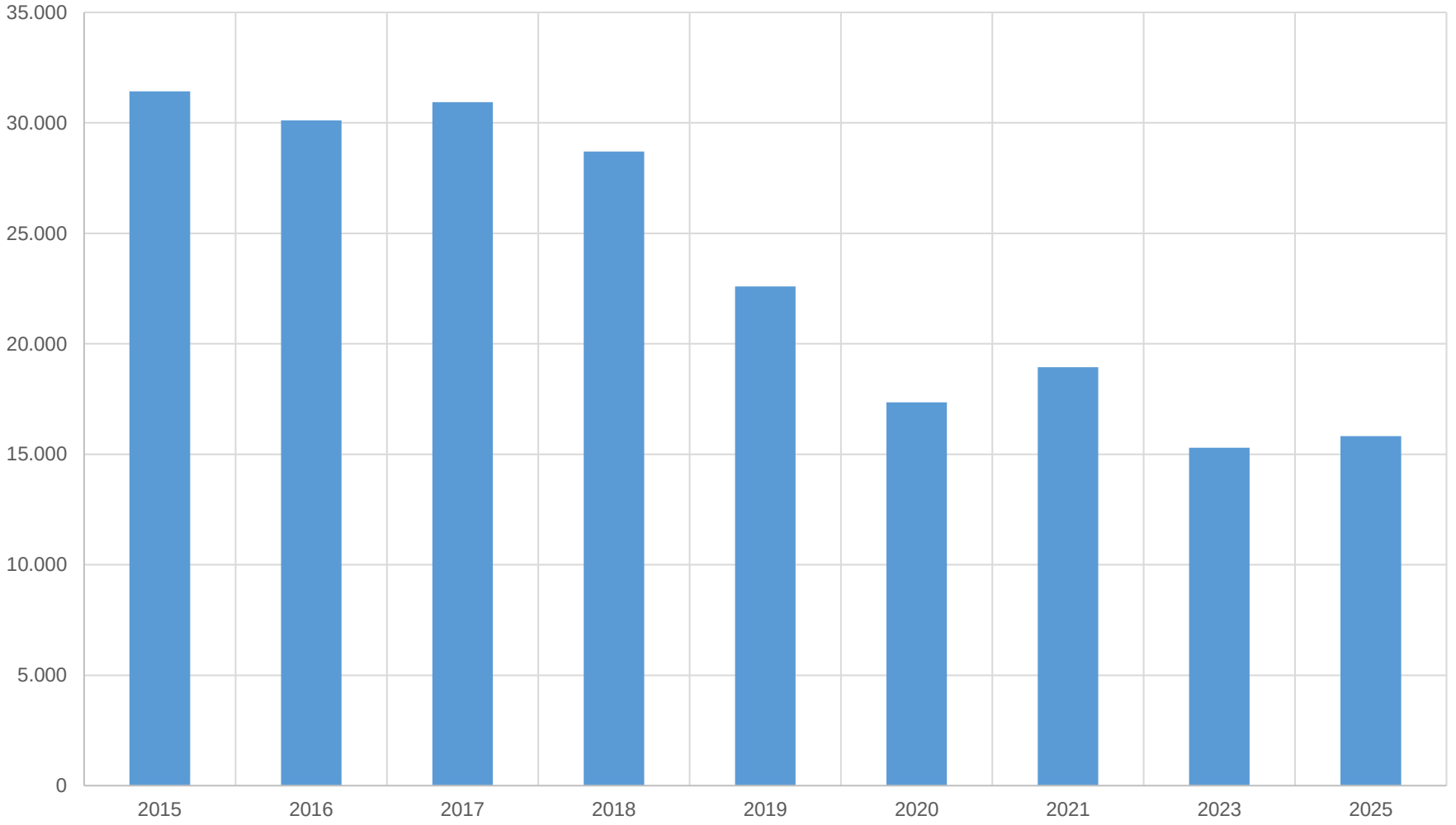
Referencer NKR:

Behandling af lumbal spinalstenose (2017)
Behandling af nyopståede lænderygsmerter (2016)
Ikke-kirurgisk behandling af nyopståede uspecifikke nakkesmerter (2016)
Behandling af udstrålende smerter fra nakken (cervikal radikulopati) (2015)
Ikke-kirurgisk behandling af nylig opstået lumbal nerverods-påvirkning (lumbal radikulopati) (2016)

Imaging of the spine SLB 2017, 2019 og 2021



X-ray and MRI lumbar spine 2015-2025



50%

Perfect storm

Choosing wisely in Denmark

NYHEDER // ARRANGEMENTER // KONTAKT

VÆLG KLOGT

Anbefalinger Vær med Om Vælg Klogt

Forside » Anbefalinger » Lænderyg

Lænderyg

Vælg Klogt anbefaler, at man undgår at lave MR-scanninger eller røntgenundersøgelser af patienter med nyopståede lænderygsmerter, når der ikke er mistanke om alvorlig lidelse

Cirka 15 procent af den danske befolkning får smerter i lænden (lænderygsmerter), og de fleste af os vil i løbet af vores liv have lænderygsmerter. Ofte er smerterne ufarlige og går over af sig selv. Typisk får patienter det råd, at de skal bevæge sig og lave øvelser, også selvom det gør ondt. Det har ikke nogen betydning for patienters behandling eller mulighed for at komme sig, om der bliver taget røntgen eller MR-scanninger af ryggen.

Det er allerede vedtaget i en national klinisk retningslinje på området, og Vælg Klogt har lavet en anbefaling, der lyder:

"Undgå billeddiagnostisk udredning med MR-scanning eller røntgenundersøgelse hos patienter med nyopståede lænderygsmerter, når der ikke er mistanke om alvorlig lidelse"

- Hvad er alvorlig lidelse
- Litteratur og kilder
- Hvem har bidraget til arbejdet

Anbefalinger

- Lænderyg
  - Arbejd med anbefalingen i praksis
- Antibiotika til urinveje
- Blodprøvepakker
- Anæstesitilsyn
- Medicinafhentning
- Antibiotika til luftveje
- Kommende anbefalinger

Download dokumenter

- Samlet anbefaling
- Kommissorium for workshop
- Materialepakke til workshop
- Idékatalog

Region of Southern Denmark

Lillebaelt Hospital

- Important to use the diagnostic tools intelligently
- A priori disease probability is important

General practitioner (clinical examination and medical history)

Surgeons and reumatologists
- Sensitive examination (MRI)

What are the requirements?

Well planned setup for lower back pain

- Regional guideline with a clear flowchart
- Phone hotlines for the department of degenerative spine disease
  - Backup with subacute slots for evaluating acute cases
- A region wide information campaign for the patients for educational purposes
- Cooperation is of paramount importance
- Involvement of key figures i necessary

Board of quality in Lillebaelt Hospital decided 2023, that the department of radiology should work with ”incidental findings”

AJR American Journal of Roentgenology

Clinical Perspective | Multispecialty | January 11, 2023

Incidental Findings and Low-Value Care

Author: Matthew S. Davenport, MD | AUTHOR INFO & AFFILIATIONS

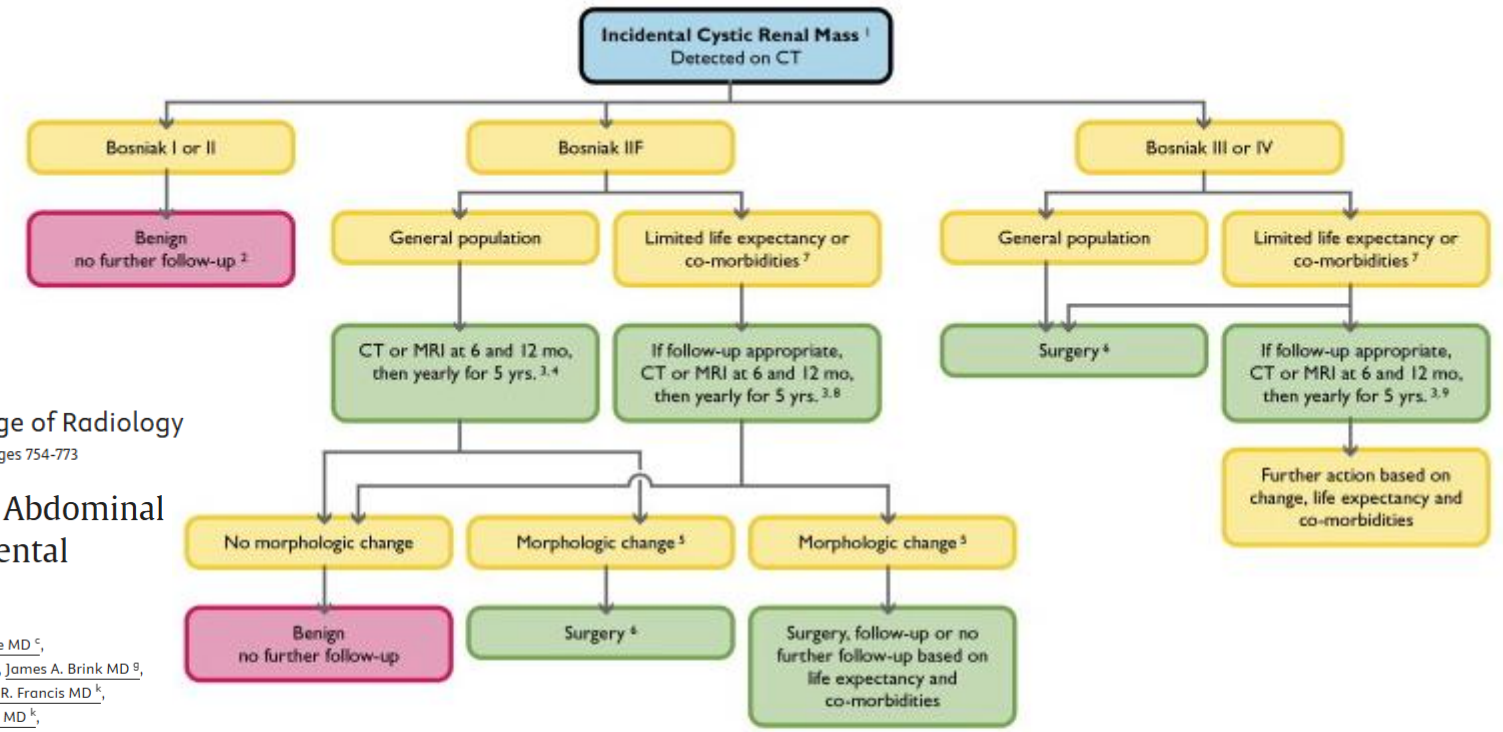
Volume 221, Issue 1 | https://doi.org/10.2214/AJR.22.28926

Incidental imaging findings are common and analogous to the results of screening tests when screening is performed of unselected, low-risk patients. Approximately 15–30% of all diagnostic imaging and 20–40% of CT examinations contain at least one incidental finding. Patients with incidental findings but low risk for disease are likely to experience length bias, lead-time bias, overdiagnosis, and overtreatment that create an illusion of benefit while conferring harm. This includes incidental detection of many types of cancers that, although malignant, would have been unlikely to affect a patient's health had the cancer not been detected. Detection of some incidental findings can improve health, but most do not.

Journal of the American College of Radiology
Volume 7, Issue 10, October 2010, Pages 754-773

Managing Incidental Findings on Abdominal CT: White Paper of the ACR Incidental Findings Committee

Lincoln L. Berland MD [a], Stuart G. Silverman MD [b], Richard M. Gore MD [c], William W. Mayo-Smith MD [d], Alec J. Megibow MD, MPH [e], Judy Yee MD [f], James A. Brink MD [g], Mark E. Baker MD [h], Michael P. Federle MD [i], W. Dennis Foley MD [j], Isaac R. Francis MD [k], Brian R. Herts MD [h], Gary M. Israel MD [g], Glenn Krinsky MD [l], Joel F. Platt MD [k], William P. Shuman MD [m], Andrew J. Taylor MD [n]



LEGEND

1 These recommendations are to be followed only if non-neoplastic causes of a renal mass (e.g., infections) have been excluded; see Ref. 48 for details. The recommendations are offered as general guidance and do not necessarily apply to all patients. See Table 1 for detailed description of Bosniak Classification.

2 When a mass smaller than 1 cm has the appearance of a simple cyst, further work-up is not likely to yield useful information.

3 Interval and duration of observation may be varied (e.g., longer intervals may be chosen if the mass is unchanged; longer duration may be chosen for greater assurance).

4 In selected patients (e.g., young), early surgical intervention may be considered, particularly if a minimally invasive approach (e.g., laparoscopic partial nephrectomy) can be utilized.

5 Morphologic change refers to change in feature characteristics, such as number of septations or their thickness. Growth should be noted, but by itself does not indicate malignancy.

6 Surgical options include open or laparoscopic nephrectomy and partial nephrectomy; each provides a tissue diagnosis. Open, laparoscopic, and percutaneous ablation may be considered where available, but biopsy would be needed to achieve a tissue diagnosis. Long-term (5- or 10-year) results of ablation are not yet known.

7 Limited life expectancy and co-morbidities that increase the risk of treatment.

8 Cystic masses 1.5 cm or smaller that are not clearly simple cysts or that cannot be characterized completely may not require further evaluation in patients with co-morbidities and in patients with limited life expectancy.

9 Percutaneous biopsy of Bosniak Category III masses may be considered, but may not be diagnostic.

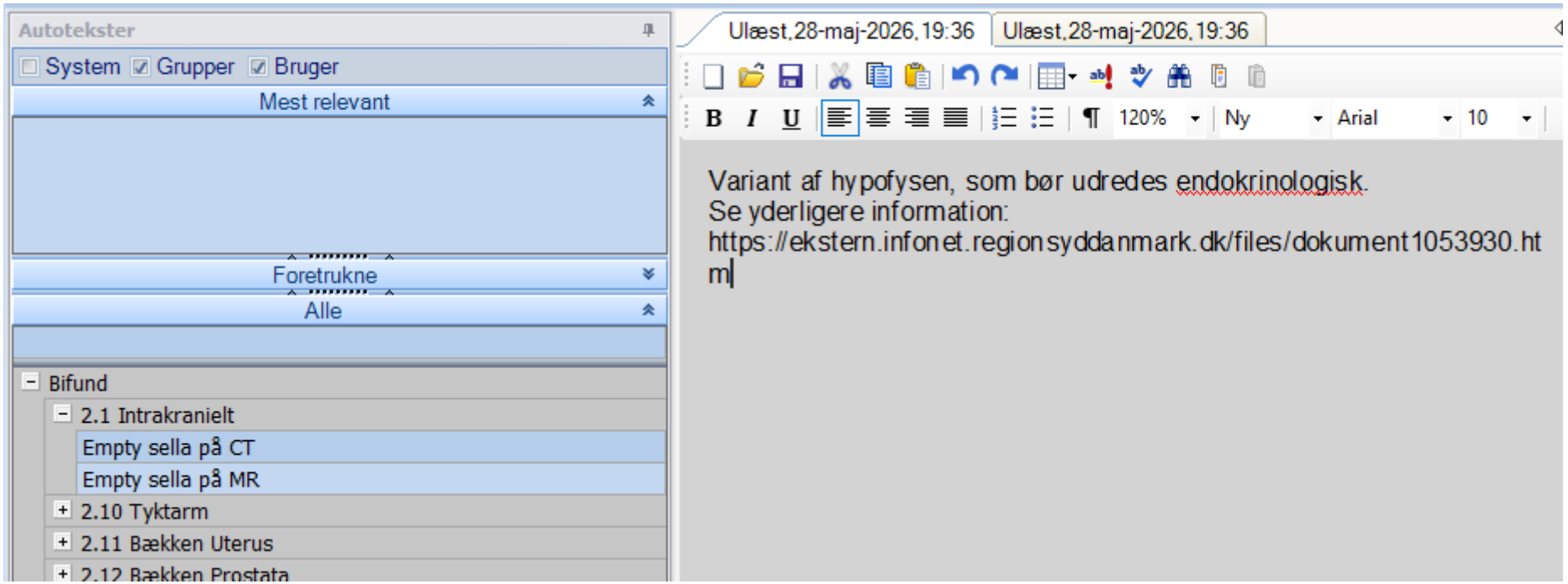
https://ekstern.infonet.regionsyddanmark.dk/files/dokument1016937.htm#afs5023838

INFONET Region Syddanmark	Sygehus Lillebælt (tværgående dokumenter) Emne: **Håndtering af bifund ved billeddiagnostiske undersøgelser, SLB**				Niveau: **Retningslinje** Godkendt af: **Charlotte Birkmose Rotbøl** **05.09.2024**
Dokumentbrugere: **SLB** Læseadgang: **Alle**	Forfatter: **Jakob Blaabjerg Espesen**	Dokumentansvarlig: **SLB/DIR**	DokumentID / Dokumentnr. **1016937 /**	Version: **1.1**	

Vis i Word

Tværgående dokument for Sygehus Lillebælt

Retningslinjen opdateres løbende med nye arbejdsgange


Autotekster
System
Grupper
Bruger
Mest relevant
Foretrukne
Alle
Bifund
2.1 Intrakranielt
Empty sella på CT
Empty sella på MR
2.10 Tyktarm
2.11 Bækken Uterus
2.12 Bækken Prostata
Ulæst,28-maj-2026,19:36
Ulæst,28-maj-2026,19:36
120%
Ny
Arial
10
Variant af hypofysen, som bør udredes endokrinologisk.
Se yderligere information:
https://ekstern.infonet.regionsyddanmark.dk/files/dokument1053930.htm

Intrakranielt - Empty sella på MR

Når eventuelt supplerende udredning/behandling af et billeddiagnostisk bifund skal vurderes hos klinikeren, bør det enkelte bifund og dets mulige konsekvenser altid vurderes ift. den enkelte patients:

- forventede restlevetid
- performancestatus
- komorbiditet

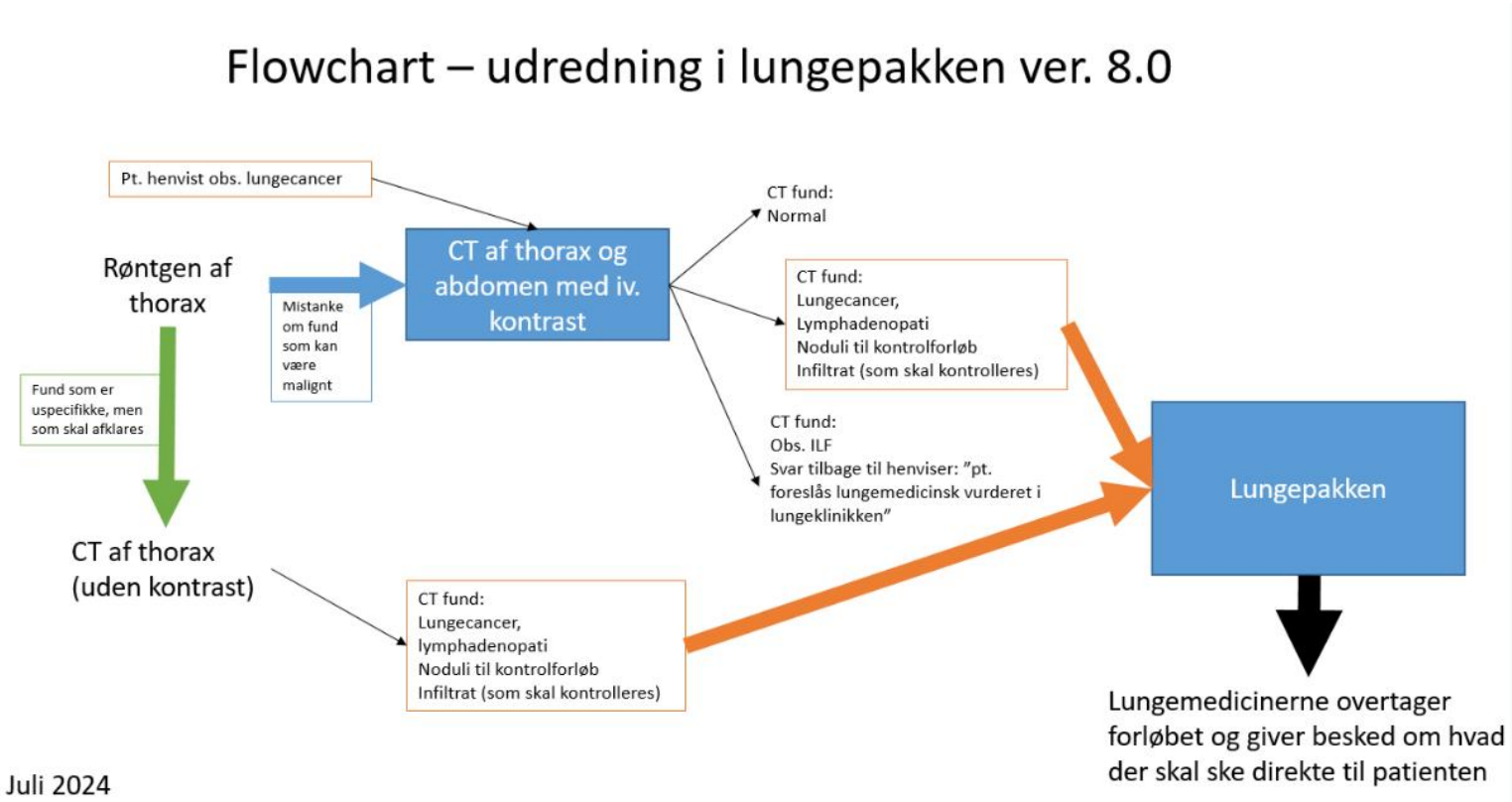
samt afstemmes med patienten via fælles beslutningstagning.

Anatomisk område:	Sella turcica
Billeddiagnostisk modalitet:	MR
Omfattede bifund:	Empty sella
Billeddiagnostisk beskrivelse:	Der laves en samlet vurdering af om der er tale om empty sella ud fra højde, udseende af hypofysen, sella turcica og hjernen generelt.
Informationen gives:	Direkte i det billeddiagnostiske svar
Frase:	Variant af hypofysen, som bør udredes endokrinologisk. Se yderligere information: https://ekstern.infonet.regionsyddanmark.dk/files/dokument1053930.htm
Information til klinikeren:	Der er fundet en variant af hypofysen, som i langt de fleste tilfælde ikke er patologisk. Det er en meget sjælden tilstand, og patienten bør henvises til endokrinologisk udredning.
Information til patienten:	Der er i hjernen fundet en variant af den kirtel, som er involveret i hormonbalancen. I langt de fleste tilfælde er det en helt normal tilstand, men det bør undersøges nærmere
Supplerende udredning/behandling:	Henvisning til endokrinologisk udredning samt MR-scanning af hypofysen (hvis ikke allerede udført)
Kan den supplerende udredning/behandling afvente udredning af dissemineret cancer?	Ja, hvis der ikke er mistanke om binyrebarkinsufficens
Henvisning sendes til:	Ambulatoriet for diabetes og hormonsygdomme, Medicinske Sygdomme, Kolding og hvis MR-scanning Røntgenafdelingerne

Retningslinjen omhandler reelle bifund første gang de erkendes.
Forandringer, som er tidligere kendt/vurderet eller kan henholdes til de symptomer, som udredningen omhandler, er ikke inkluderet

The work of making these flowcharts has led to very fruitful dialogue – also within the department…

Then we have to make sure that this actually happens…



Another (historic) focus areas of our department

- Testicular calcifications

Article

An Insight into Testicular Macrocalcification—A Retrospective Study of 42 Cases on a Rare Sonographic Finding

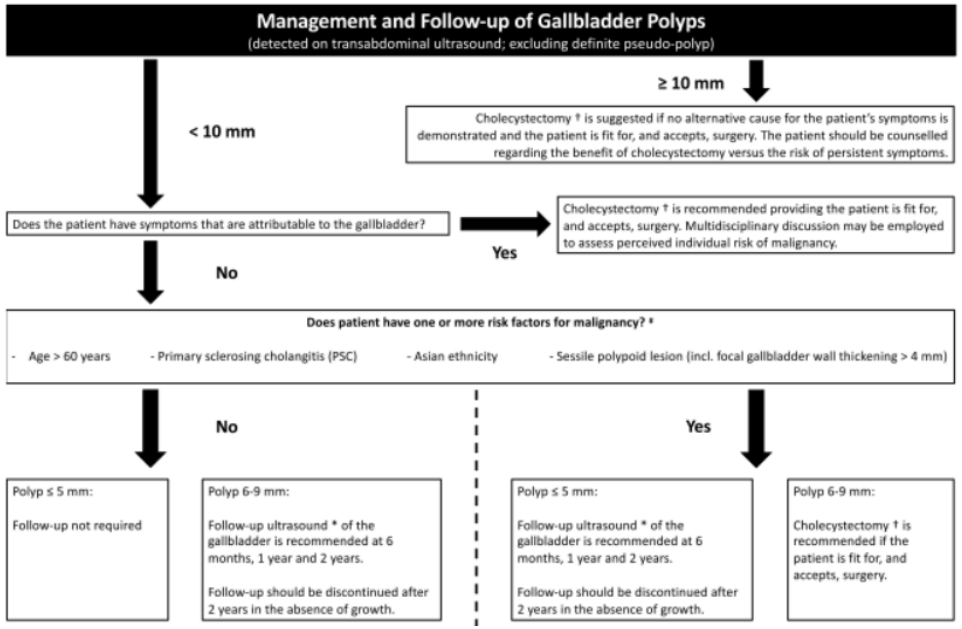
Malene Roland Vils Pedersen [1,2,3,*], Ditte Marie Toft [1], Jan Lindebjerg [3,4], Søren Rafael Rafaelsen [1,2] and Søren Kissow Lildal [5]

and diverse clinical history. However, we found a low number of patients with testicular macrocalcification and testicular tumors, indicating that macrocalcifications have a benign nature, and that macrocalcification alone should not be a primary concern for malignancy, but this needs to be confirmed in further studies.

- Gallbladder polyps

Management and follow-up of gallbladder polyps: updated joint guidelines between the ESGAR, EAES, EFISDS and ESGE

Kieran G. Foley[1] · Max J. Lahaye[2] · Ruedi F. Thoeni[3] · Marek Soltes[4] · Catherine Dewhurst[5] · Sorin Traian Barbu[6] · Yogesh K. Vashist[7] · Søren Rafael Rafaelsen[8] · Marianna Arvanitakis[9] · Julie Perinel[10] · Rebecca Wiles[11] · Stuart Ashley Roberts[12]



Conclusion

- Radiologists are able to provide better care if we participate actively in the discussion about the role of radiology
- Our knowledge is essential to make smart decisions and use the radiological ressources optimally