

# ΦΛΕΓΜΟΝΩΔΕΙΣ ΑΡΘΡΙΤΙΔΕΣ

«Σεμινάριο νοσηλευτικής και  
γραμματειακής υποστήριξης ιατρού  
χρόνιων νοσημάτων»

ΑΝΔΡΕΑΣ Γ.ΜΠΟΥΝΑΣ

ΕΠΕΜΥ-ΡΟΔΟΣ 09-2022

# ΣΧΕΔΙΟ ΟΜΙΛΙΑΣ

- Ταξινόμηση Ρευματικών Νοσημάτων
- Ανοσία-Αυτοανοσία
- Φλεγμονώδης αρθρίτις
- Η Ιατρική τον 21<sup>ο</sup> αιώνα

# Ρευματικά Νοσήματα

Αυτοάνοσα

Εκφυλιστικ  
ά

Μεταβολικά

«μηχανικού» τύπου

Σχετιζόμενα με άλλες  
παθήσεις (π.χ  
ενδοκρινικές κλπ)

# ΑΥΤΟΑΝΟΣΑ (ΣΥΣΤΗΜΑΤΙΚΑ) ΡΕΥΜΑΤΙΚΑ ΝΟΣΗΜΑΤΑ

Ρευματοειδής αρθρίτις

Συστηματικός Ερυθηματώδης Λύκος

Σκληροδερμία

Αγγειίτιδες

σ.Sjogren

Μυοσίτιδες



# ΕΚΦΥΛΙΣΤΙΚΑ ΡΕΥΜΑΤΙΚΑ ΝΟΣΗΜΑΤΑ

Οστεοαρθρίτιδα

...άλλα.....

> [APMIS](#). 2016 Sep;124(9):805-11. doi: 10.1111/apm.12564. Epub 2016 Jun 22.

## Prevalence of systemic autoimmune rheumatic diseases and clinical significance of ANA profile: data from a tertiary hospital in Shanghai, China

Zaixing Yang<sup>1</sup>, Yingpeng Ren<sup>2</sup>, Donghong Liu<sup>2</sup>, Feng Lin<sup>3</sup>, Yan Liang<sup>1</sup>

Affiliations + expand

PMID: 27328803 DOI: [10.1111/apm.12564](#)

### Abstract

It is necessary and useful to explore prevalence of various systemic autoimmune rheumatic diseases (SARDs) in patients with suspicion of having SARDs and to characterize antinuclear antibodies (ANA) profile for identifying different populations (SARDs and non-SARDs). A total of

Ρευματικά νοσήματα =  
Συχνά Νοσήματα

ΑΥΤΟΑΝΟΣΑ 5-8%

Εκφυλιστικά  
(Οστεοαρθρίτις) > 10-15%

# ΑΥΤΟΑΝΟΣΙΑ

ΑΥΤΟΑΝΟΣΑ ΡΕΥΜΑΤΙΚΑ ΝΟΣΗΜΑΤΑ

# ΑΝΟΣΙΑ (1910)

Προστασία  
από -  
μικρόβια

- ιούς

- μύκητες

- παράσιτα

Αργότερα όμως.....και σε

- νεοπλασίες

- μεταμοσχεύσεις

- αυτοάνοσα νοσήματα

ΑΝΟΣΟΛΟΓΙΚΟ  
ΣΥΣΤΗΜΑ

ή  
ΑΝΟΣΟΠΟΙΗΤΙΚΟ  
ΣΥΣΤΗΜΑ

Σύστημα οργάνων,

κυττάρων,

μορίων

ΠΡΟΣΤΑΣΙΑ.....

# ΑΝΟΣΙΑ

Έμφυτη (φυσική-  
innate) ανοσία

Ειδική (επίκτητη-  
adaptive) ανοσία

# Έμφυτη (φυσική) ανοσία

...από τη γέννηση...(& γρήγορη  
δράση)

Δεν εξελίσσεται

Φυσικοί  
φραγμοί....(δέρμα,βλενογόνοι)

Μηχανισμοί (μετά την  
επίδραση...)



# Ειδική ανοσία

...μετά την επαφή  
( με βλαπτικό  
παράγοντα)

...αναπτύσσεται  
αργά

# Ειδική ανοσία

...έχει ειδικότητα

...έχει μνήμη

...δεν αντιδρά με το  
«ίδιον»...ΑΝΟΧΗ

# ΚΑΤΑΡΓΗΣΗ ΑΝΟΧΗΣ...

=> Αυτοανοσία

&

=> Αυτοάνοση νόσο

# ΑΝΟΣΟΛΟΓΙΚΟ ΣΥΣΤΗΜΑ

Σύστημα  
οργάνων

ΚΥΤΤΑΡΩΝ

ΜΟΡΙΩΝ

# ΟΡΓΑΝΑ

Πρωτογενή

Δευτερογενή

# Πρωτογενή όργανα

Μυελός  
των οστών

Θύμος  
αδένας

# Δευτερογενή όργανα



Λεμφαδένες

Σπλήνας

# ΚΥΤΤΑΡΑ

---

Τ λεμφοκύτταρα (80-90%)

---

...θύμος

---

...κυτταροκίνες

---

Β λεμφοκύτταρα (10-15%)

---

...μυελός οστών

---

...Αντισώματα

---



# T & B λεμφοκύτταρα

...συνεργάζονται &

...αναγνωρίζουν ΑΝΤΙΓΟΝΑ

...δυνατότητα => 100.000.000.000

# ΜΟΡΙΑ- ουσίες, διαβιβαστές

## - ΚΥΤΤΑΡΟΚΙΝΕΣ

...ανοσορρυθμιστικές IL-2

...(προ)φλεγμονώδεις TNF- $\alpha$ , IL-1, IL-6

...αντιφλεγμονώδεις TGF- $\beta$ , IL-10


## - ΧΗΜΕΙΟΚΙΝΕΣ

# Δράση Ανοσολογικού Συστήματος

Προστατευτική.....  
( λοιμώξεις )

Επιβλαβής....( σε διέγερση  
από μη λοιμογόνους  
παράγοντες )

ΑΥΤΟΑΝΟΣΙΑ = αντίδραση Β και Τ  
λεμφοκυττάρων έναντι του οργανισμού  
(χωρίς βλάβες σε ιστούς) !!!



ΑΥΤΟΑΝΟΣΟ ΝΟΣΗΜΑ =  
κατάσταση που έχουμε βλάβη σε  
όργανα λόγω αυτοανοσίας !!!

# ΟΡΓΑΝΟΕΙΔΙΚΑ ΑΥΤΟΑΝΑΣΑ ΝΟΣΗΜΑΤΑ

Αυτοάνοσες ενδοκρινοπάθειες

Πέμφιγα

Αυτοάνοση ηπατίτιδα

Λεύκη

Αυτοάνοσα νοσήματα νευρικού  
συστήματος (MS)

Πρωτοπαθής χολική κίρρωση

# ΣΥΣΤΗΜΑΤΙΚΑ Α ΑΥΤΟΑΝΟΣΑ ΝΟΣΗΜΑΤΑ

Ρευματοειδής αρθρίτις

Συστηματικός Ερυθηματώδης Λύκος

Σκληροδερμία

Αγγειίτιδες

σ.Sjogren

Μυοσίτιδες

# Αυτοάνοσα Νοσήματα-ΑΙΤΙΟΛΟΓΙΑ

---

....Αλληλεπιδρούν Παράγοντες

---

- Περιβαλλοντικοί

---

- Γενετικοί

---

- Ορμονικοί

---

- Ψυχικοί

# ΠΕΡΙΒΑΛΛΟΝΤΙΚΟΙ ΠΑΡΑΓΟΝΤΕΣ

Λοιμώξεις από ιούς και βακτήρια

Φάρμακα

Υπεριώδης ακτινοβολία

ΚΑΠΝΙΣΜΑ !!!!!



# ΚΛΙΝΙΚΑ τα Αυτοάνοσα Ρευματικά Νοσήματα...

... προσβάλλουν ....όλα τα  
συστήματα του οργανισμού !!!!!

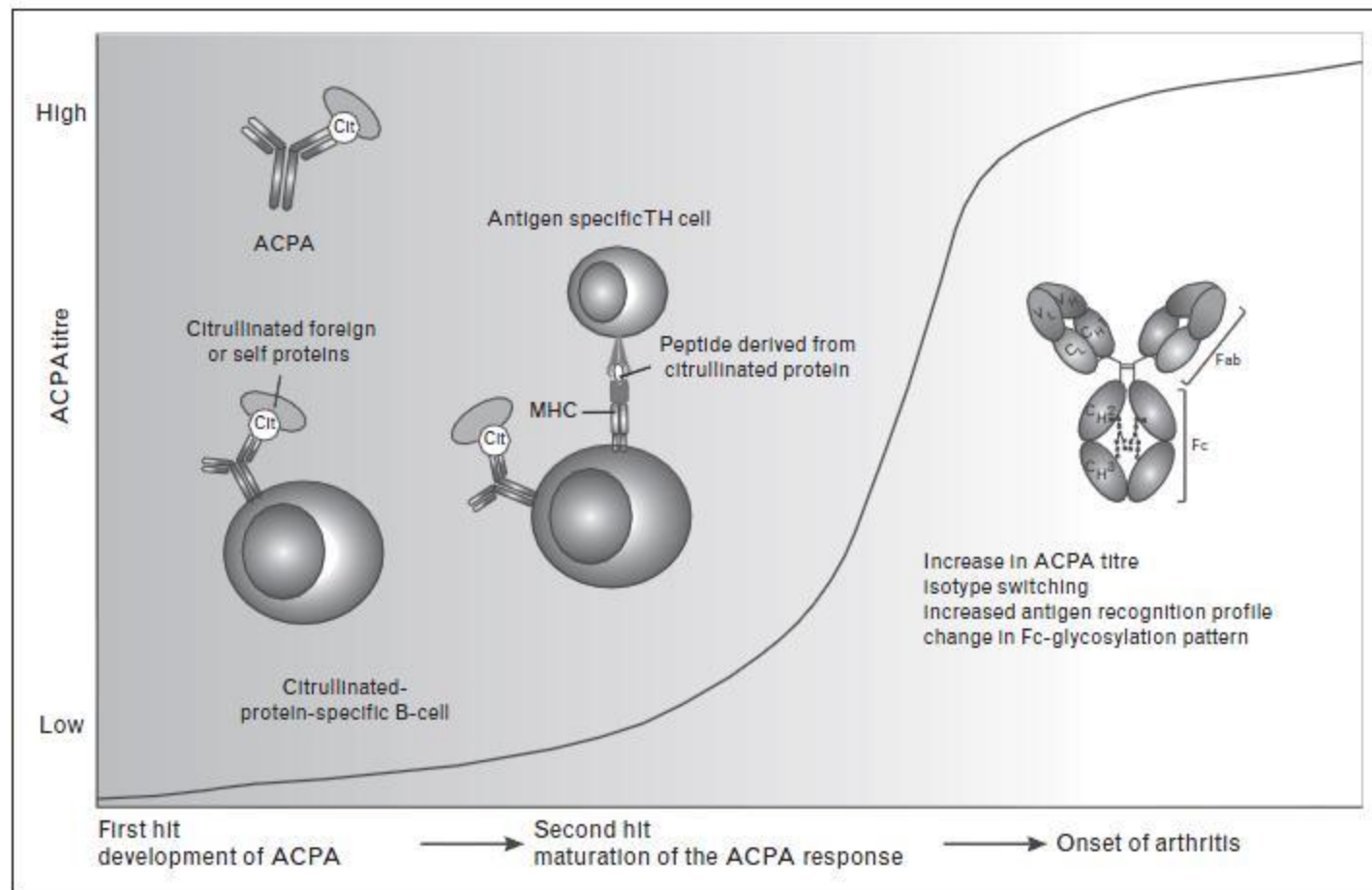
Σήμερα....εξαιρετικά Διαγνωστικά  
εργαλεία και Φάρμακα

.....συχνά άσκοπες  
καθυστερήσεις

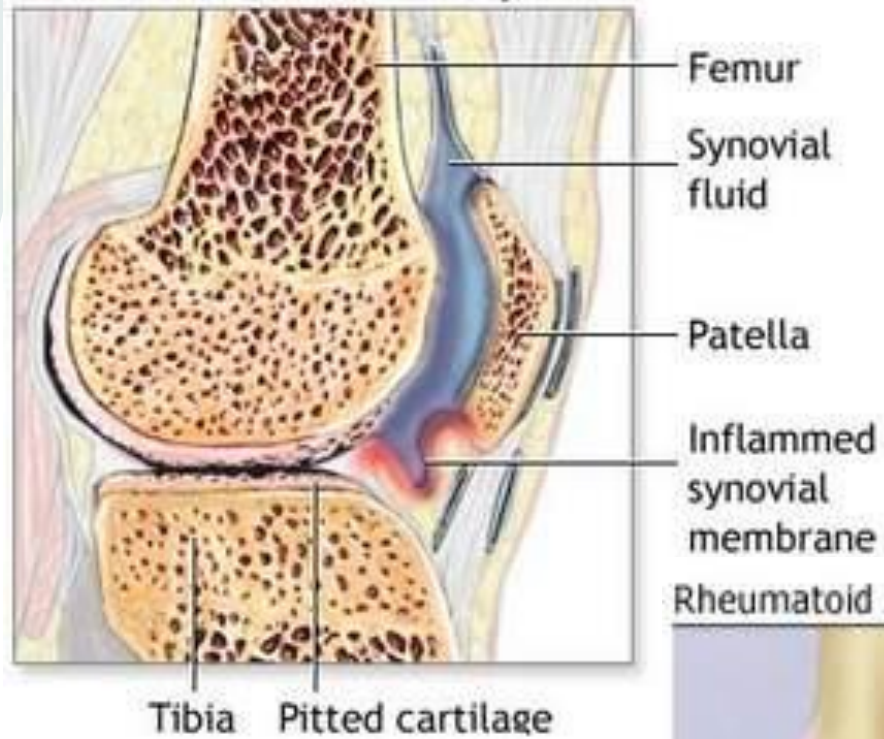
Καθυστερήσεις στη διάγνωση και θεραπεία  
μειώνουν το προσδόκιμο επιβίωσης !!!

Απαιτείται ΕΝΗΜΕΡΩΣΗ.....

Γιατρών άλλων Ειδικοτήτων,  
Νοσηλευτών,  
άλλων Επαγγελματιών Υγείας,  
Ασθενών  
& του Γενικού Πληθυσμού !!!!!



Cut-section view of knee joint

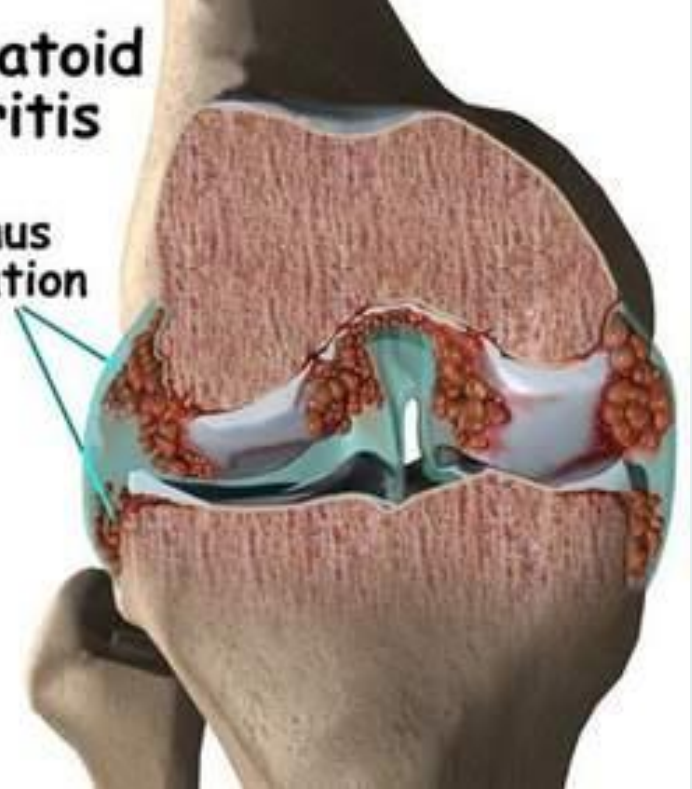


Rheumatoid Arthritis



Rheumatoid arthritis

Pannus formation



















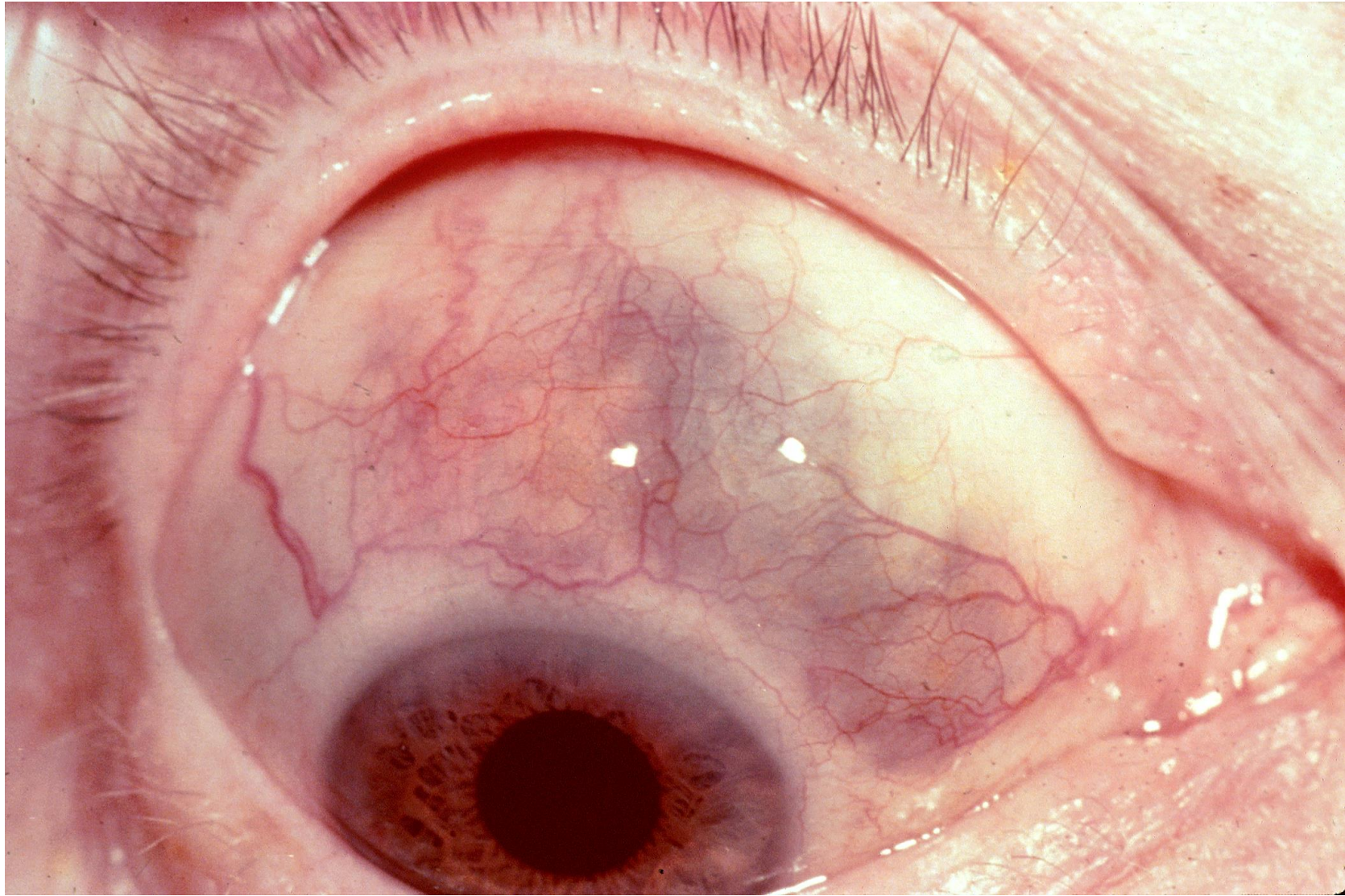




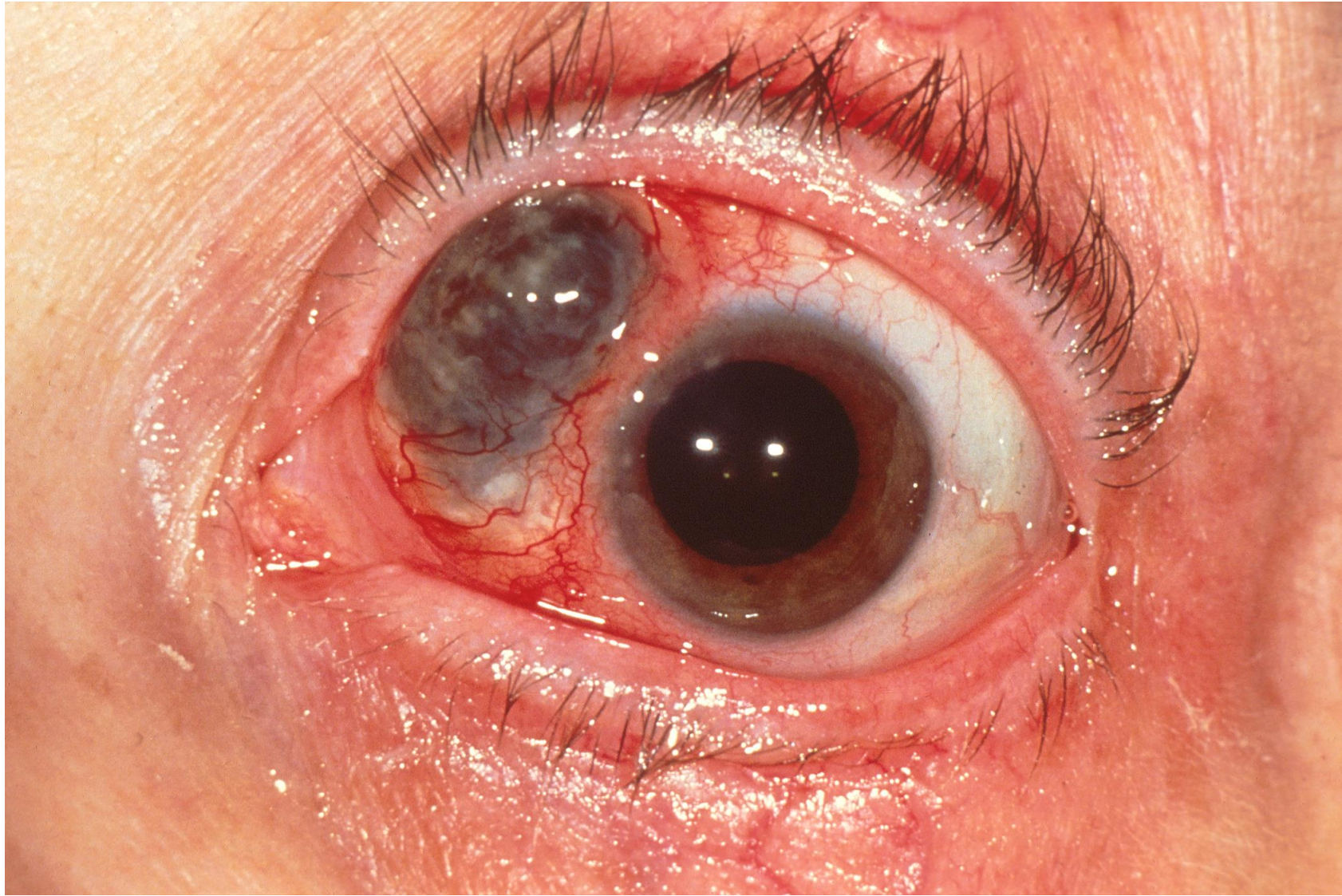




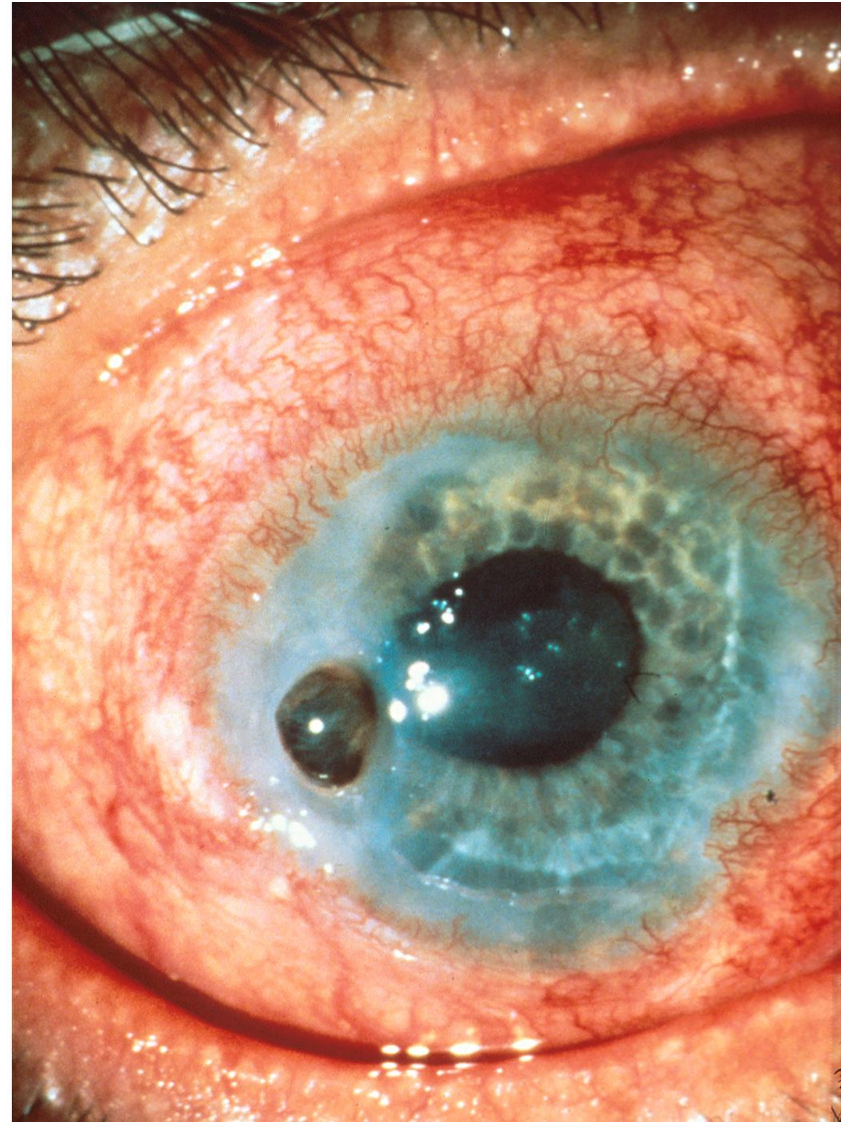
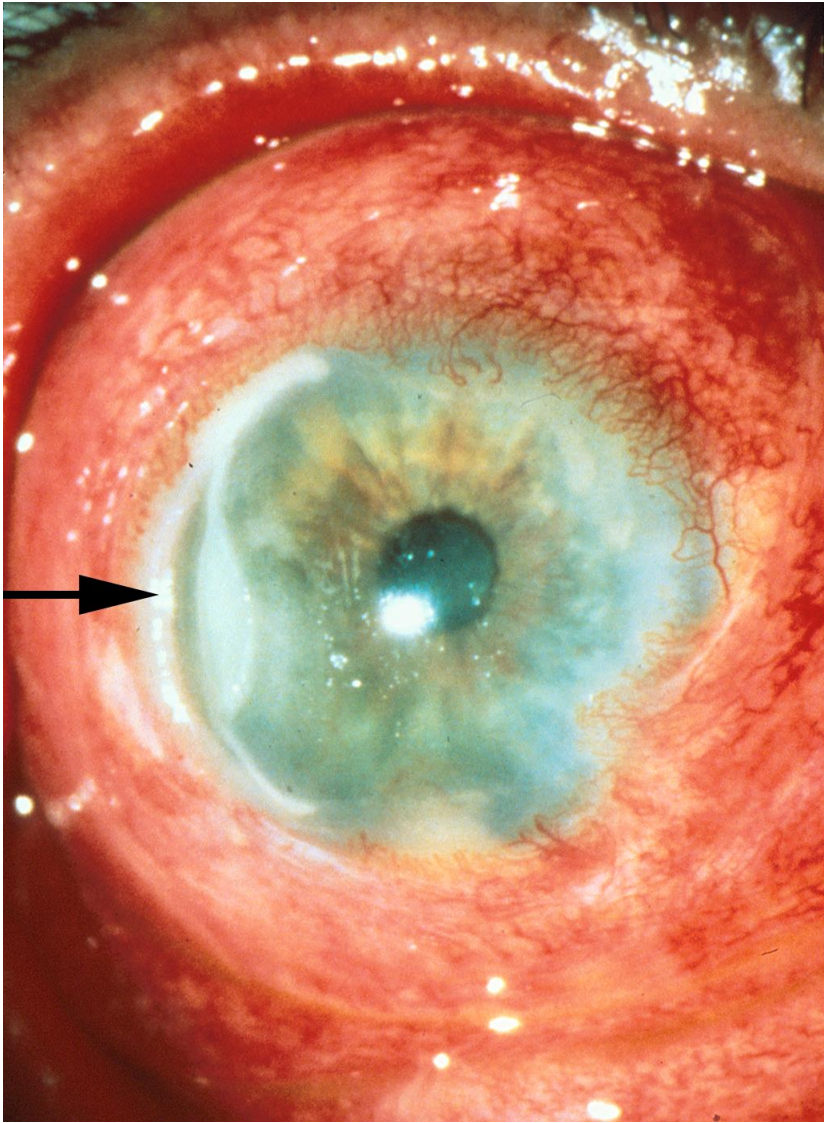












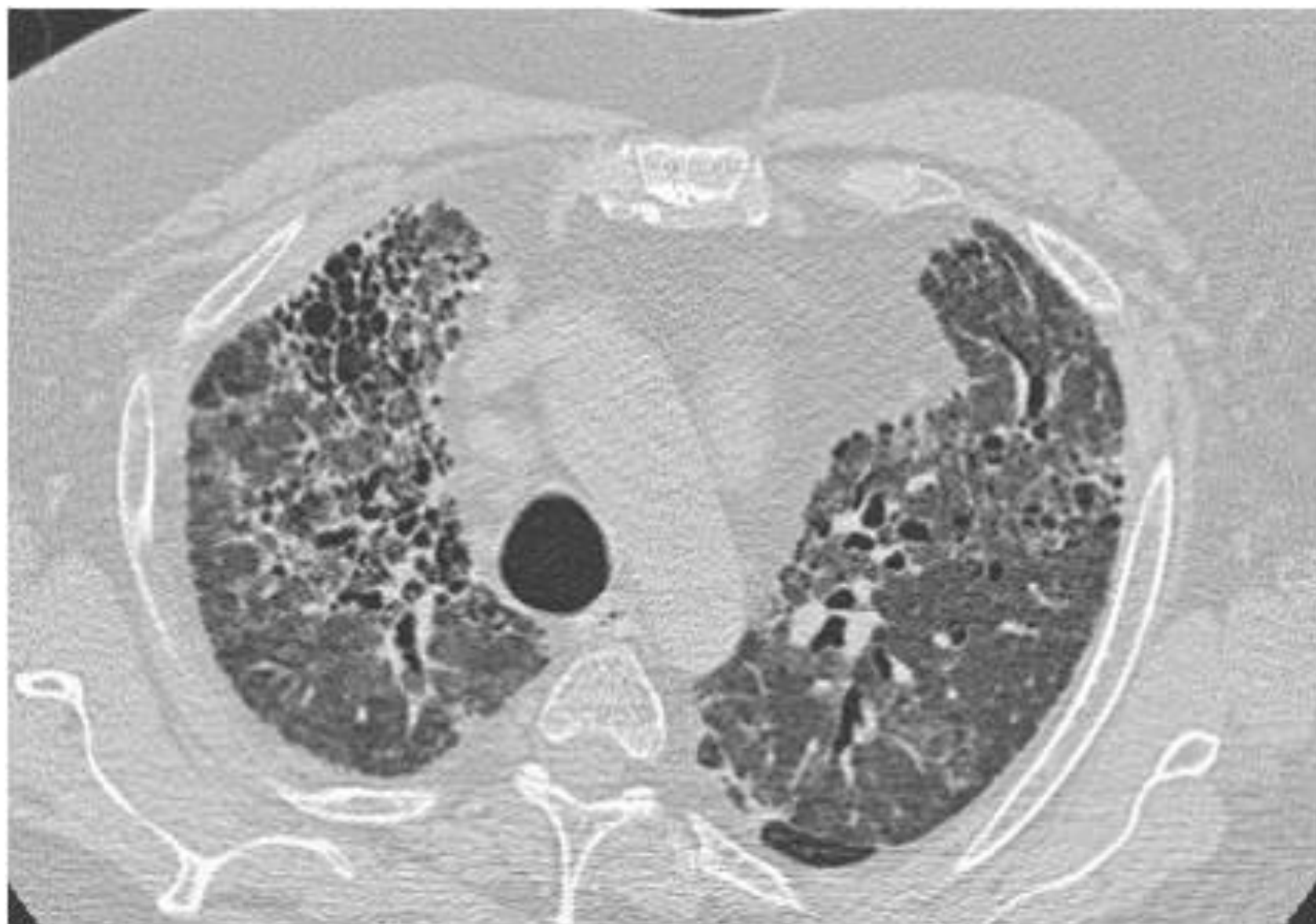


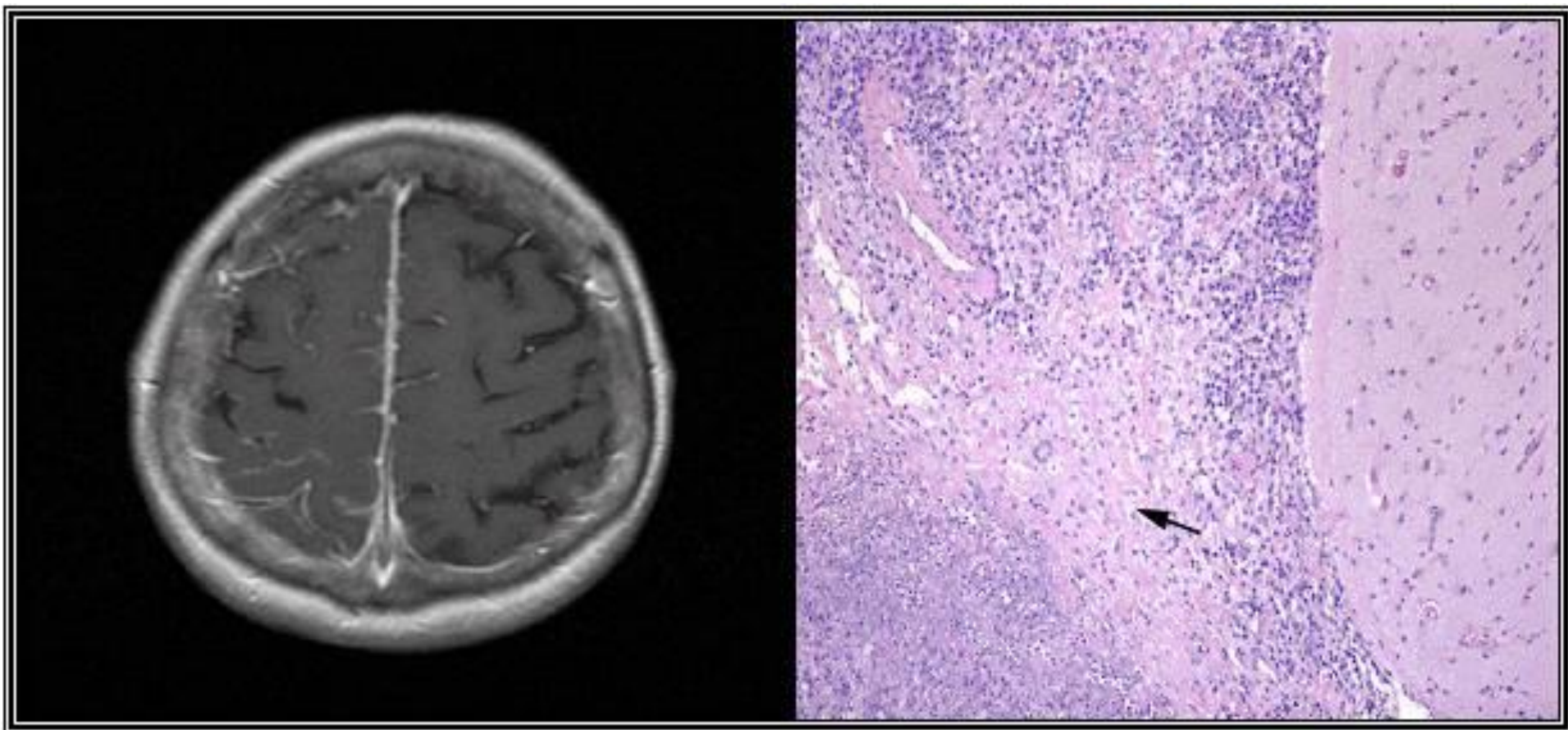






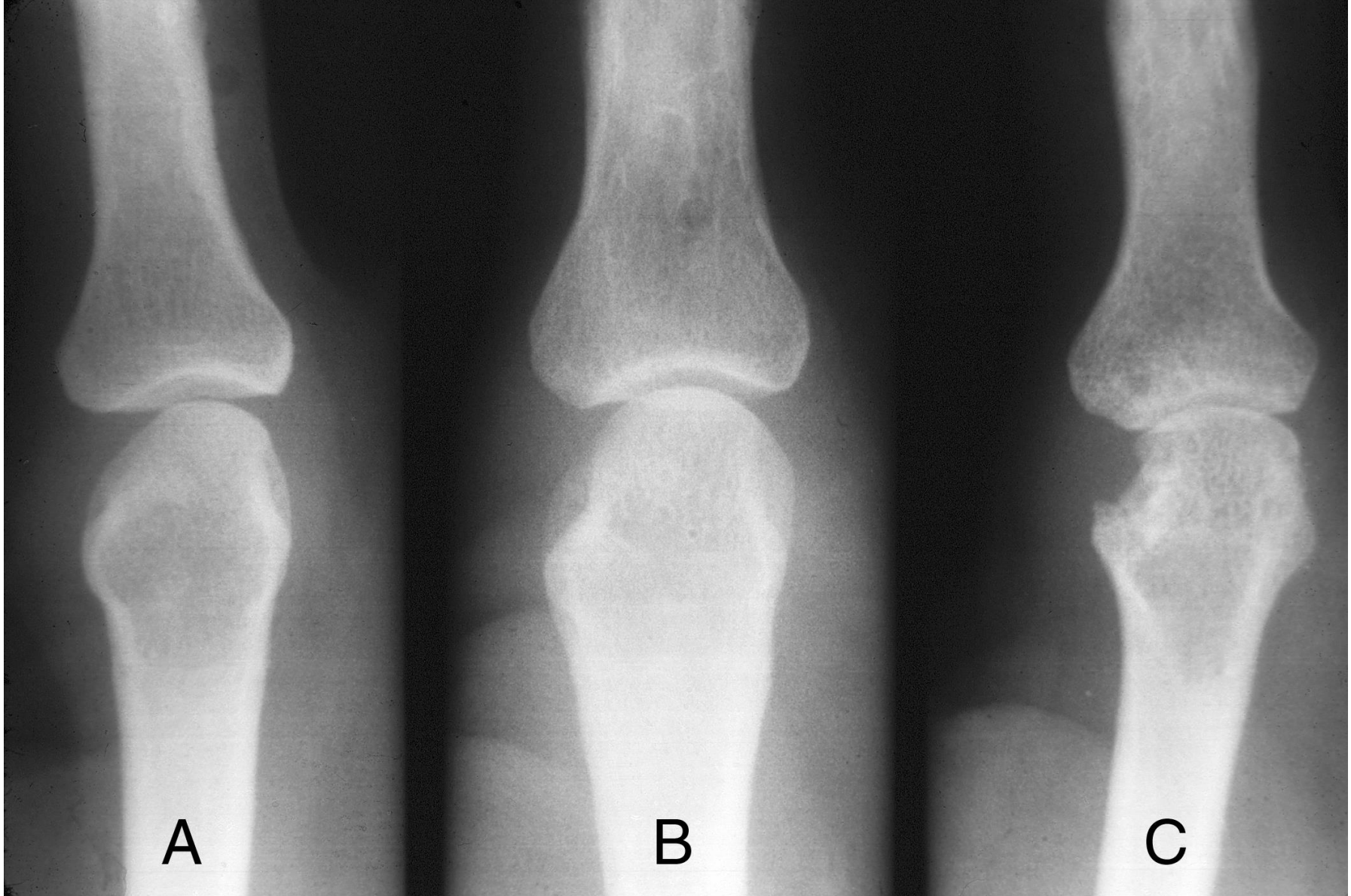










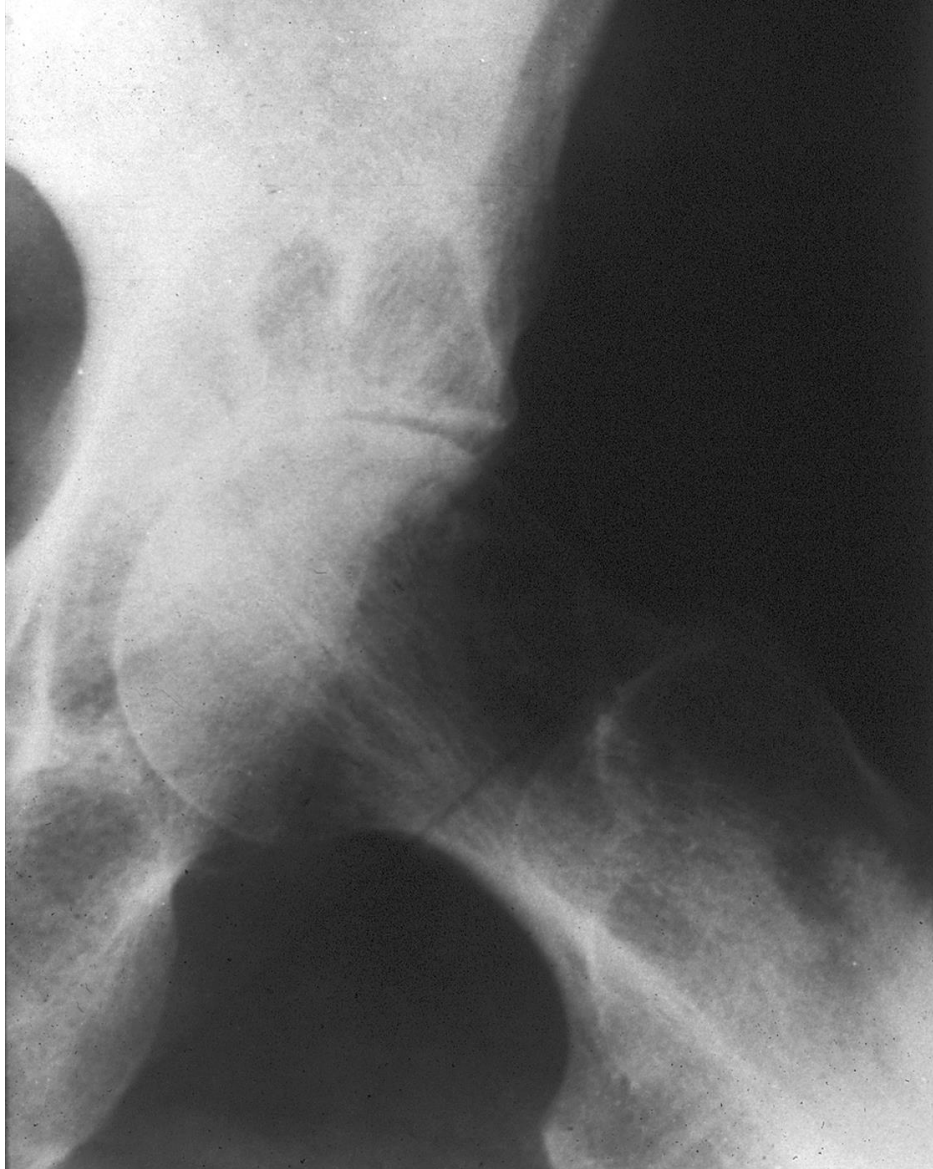




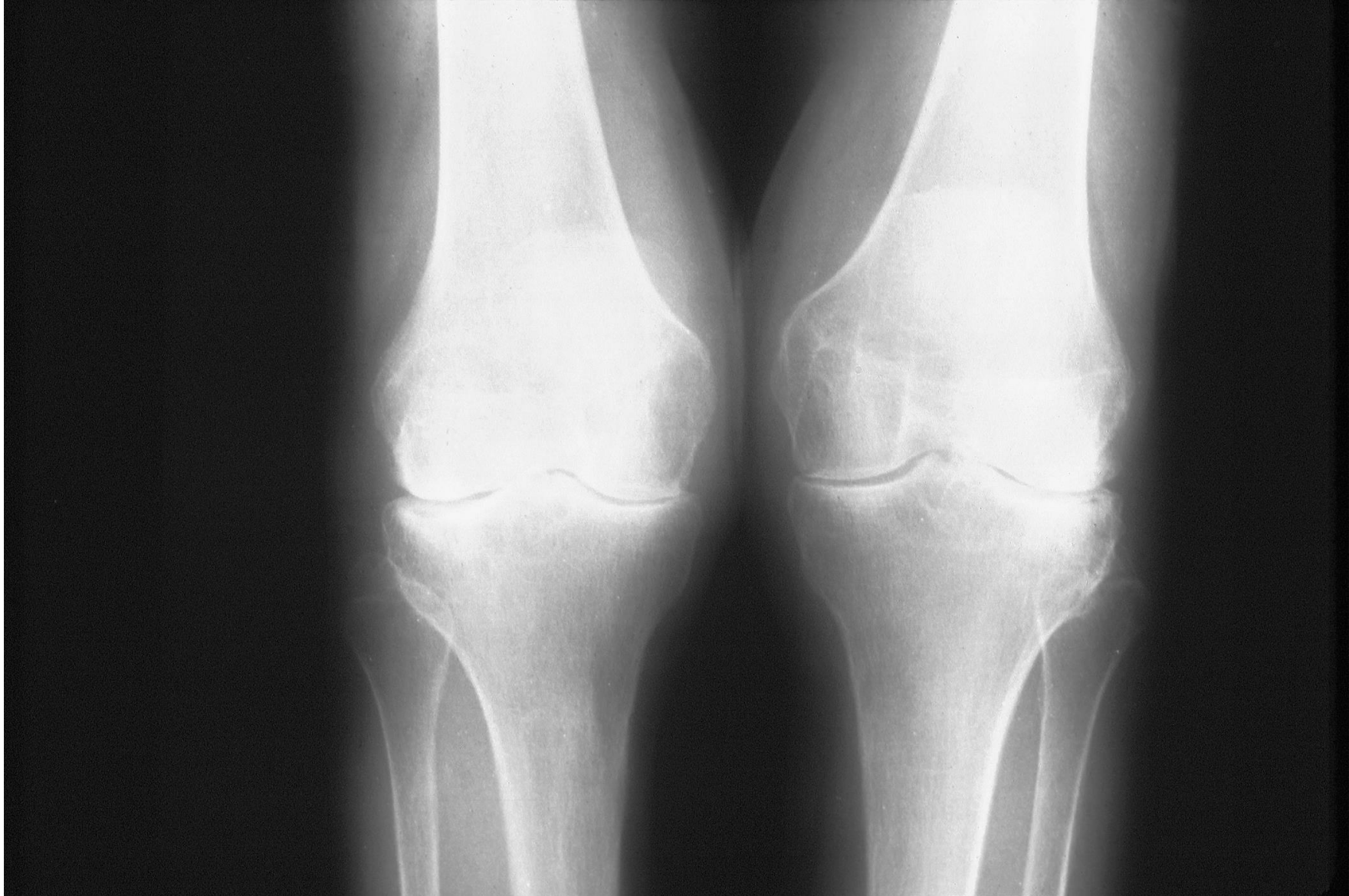


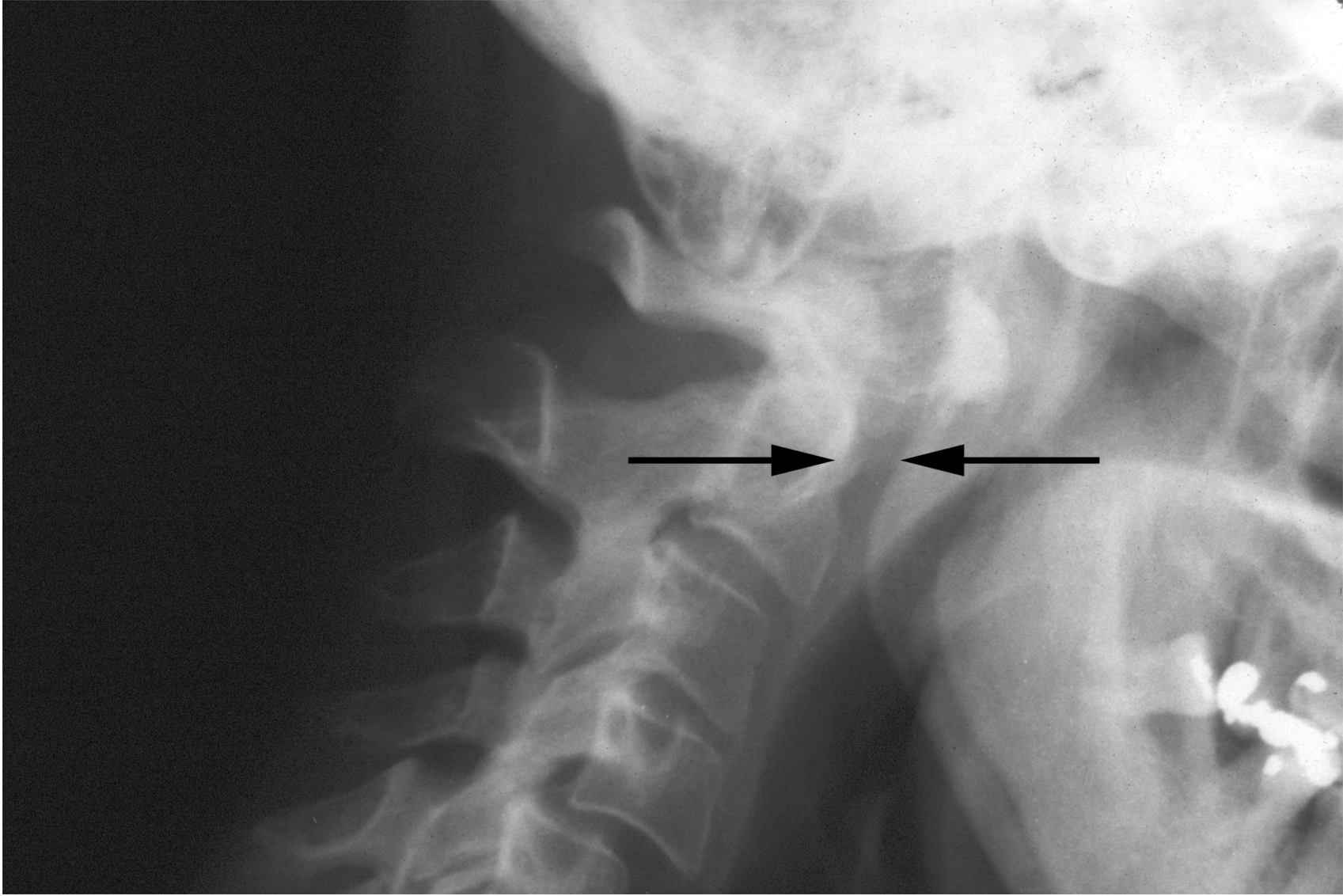












# ΦΛΕΓΜΟΝΩΔΗΣ ΑΡΘΡΙΤΙΔΑ

Συμμετρική συνήθως

Μικρές αθρώσεις

(πρωϊνή) Δυσκαμψία > 1 ώρα

Συστηματικά συμπτώματα

# Η Κλινική Ιατρική τον 21<sup>ο</sup> αιώνα



EBM (EVIDENCE BASED  
MEDICINE)



T2T (TREAT TO TARGET)



SHARED DECISION

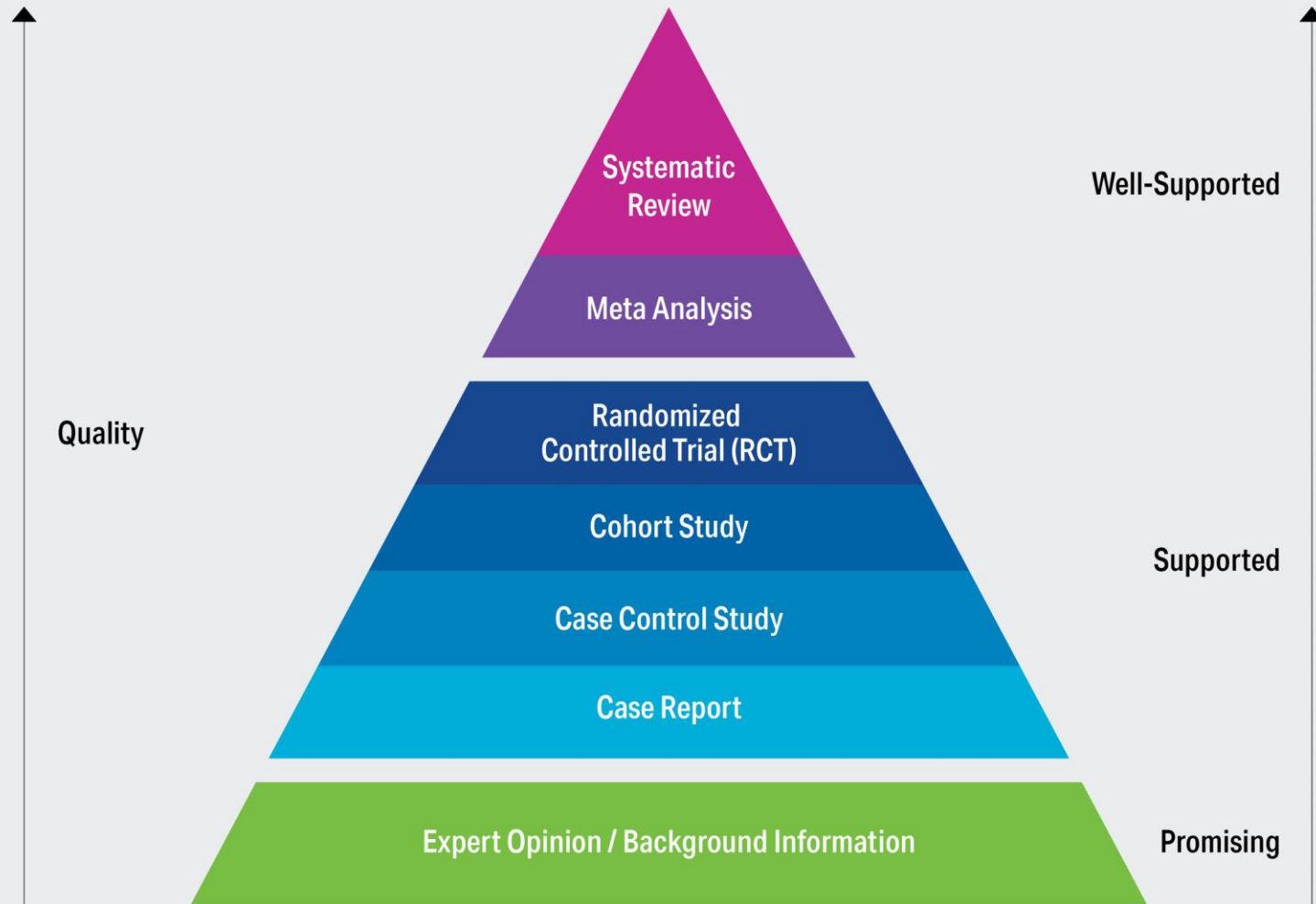


ΙΑΤΡΟΣ - ΝΟΣΗΛΕΥΤΡΙΑ ,  
ΓΡΑΜΜΑΤΕΑΣ - ΑΣΘΕΝΗΣ

**Evidence-Based**  
**Medicine**  
research  
knowledge  
practice  
conducted  
optimize  
evidence  
emphasizing  
pop  
approach  
support  
degree  
an  
co  
Medical  
programs  
developed  
based on evidence  
clinician's  
controlled  
School  
assure  
strength  
requiring  
spread  
studies  
design  
trials  
individual  
strong  
aims  
classifying  
ans  
determined  
test  
strategy  
led  
ally  
as  
led  
mal  
rm  
makers  
was  
systematic  
previously  
reviews  
recommendations  
just  
supplemented  
methods  
1980s  
tries



## Hierarchy of Evidence







# T2T (RA)

Κατάλληλος (υψηλός) στόχος (ύφεση)

Κατάλληλα όπλα (DMARDs)

Κατάλληλες μεζούρες (DAS, SDAI, CDAI..)

Κατάλληλη προσήλωση στη στρατηγική

Στόχος....Η Ύφεση



# Κατάλληλα σύγχρονα όπλα....DMARDS



# Biologics

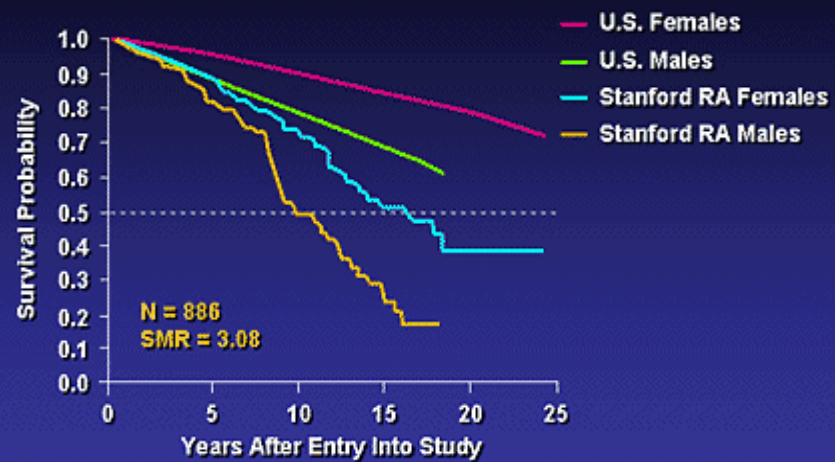


# Βιολογικά φάρμακα



## Premature Mortality in Patients With RA in the Pre-Biologic Era

Kaplan-Meier Survival Curves in a U.S. Population

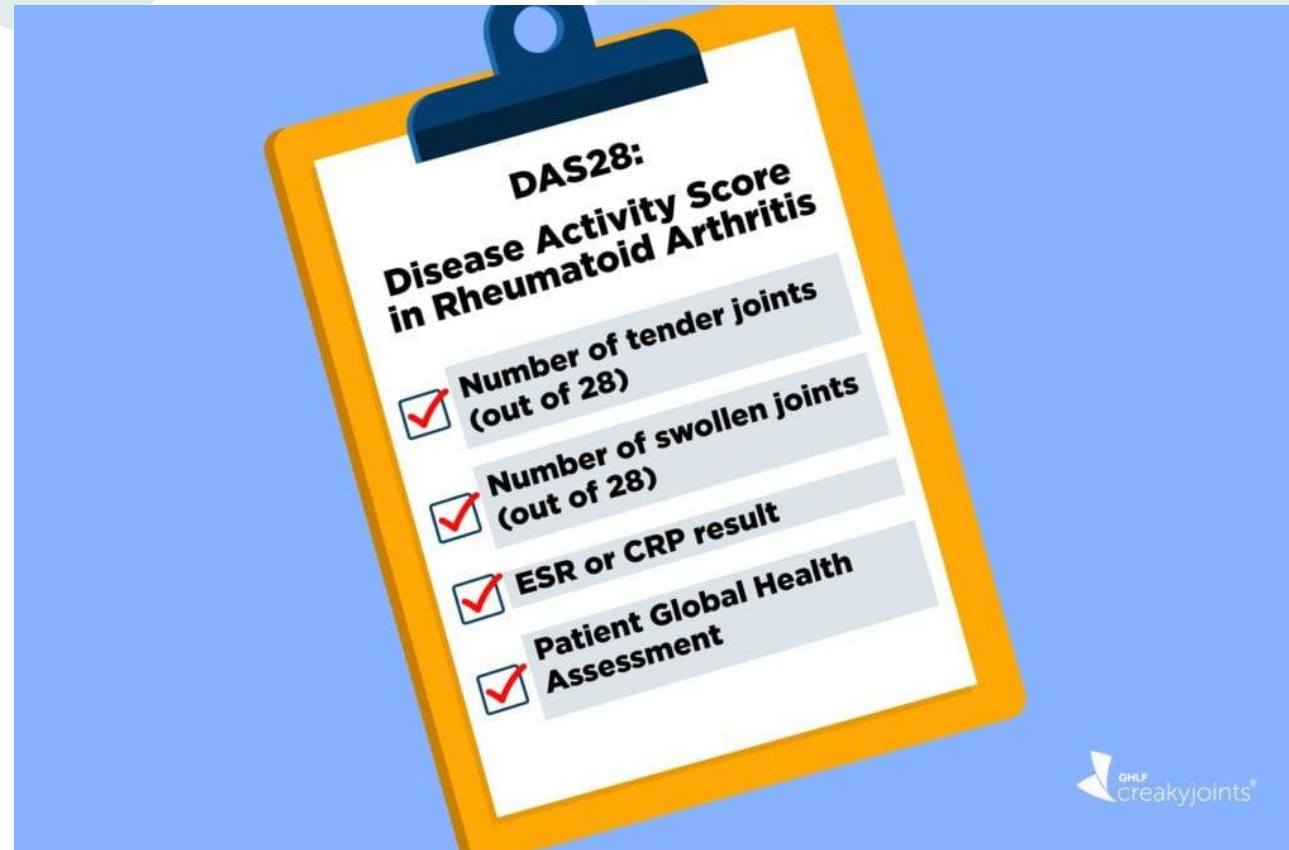


SMR = standardized mortality ratio for patients with RA compared with non-RA controls.  
Wolfe F, et al. *Arthritis Rheum.* 1994;37:481-494.

# T2T (RA)

- Κατάλληλος (υψηλός) στόχος (ύφεση)
- Κατάλληλα όπλα (DMARDs)
- Κατάλληλες μεζούρες (DAS,SDAI,CDAI..)
- Κατάλληλη προσήλωση στη στρατηγική

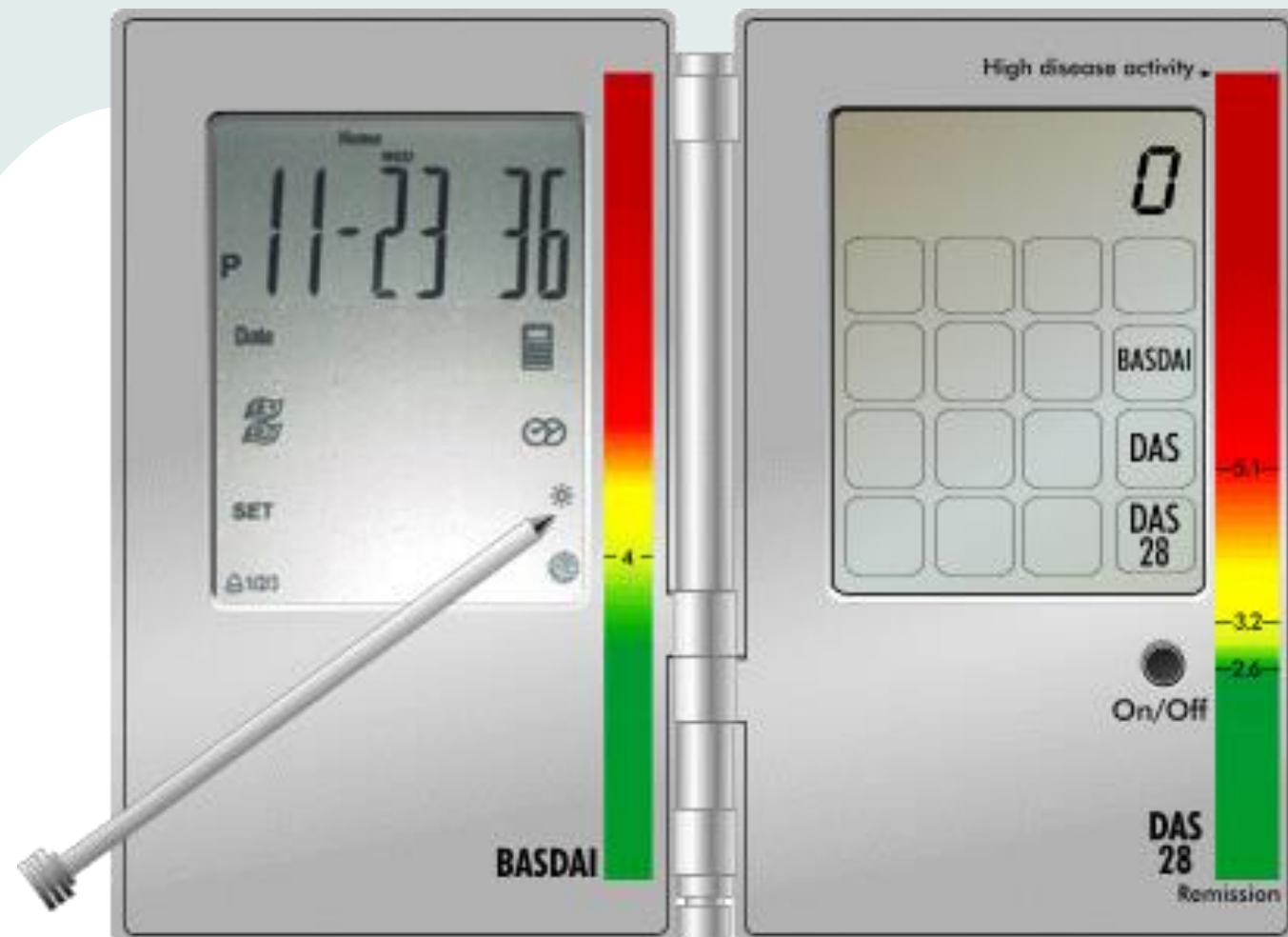
# Κατάλληλες μεζούρες- δείκτες(DAS,SDAI,CDAI..)







(not actual size)



# Άλλα...

- HAQ
- ASDAS
- SLEDAI

# Άλλοι δείκτες

- SF-36 & SF-12 (Δείκτες Ποιότητας ζωής)
- FACIT-F (Κλίμακα κόπωσης)
- PSQI (Δείκτης ποιότητας ύπνου)

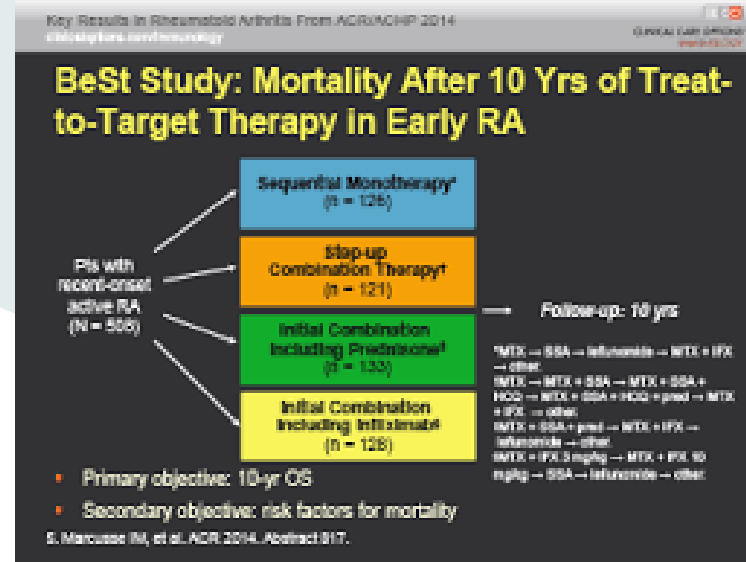
# Κατάλληλη στρατηγική...και προσήλωση



# Κατάλληλη στρατηγική...και προσήλωση

- Εντατική προγραμματισμένη παρακολούθηση
- Αξιοποίηση όλων των εργαλείων της φαρέτρας
- Συχνός επαναπροσδιορισμός της πορείας
- ...μέχρι τον τελικό στόχο!!!

- BeSt study



- TICORA

- CAMERA

### Tight Control in RA (TICORA)

18-mo, open-label trial enrolling 111 patients with disease duration < 5y

#### Routine Care Group

- Visits every 3 mo
- Routine assessments
- Clinician judgment
- Drug changed by doctor's choice

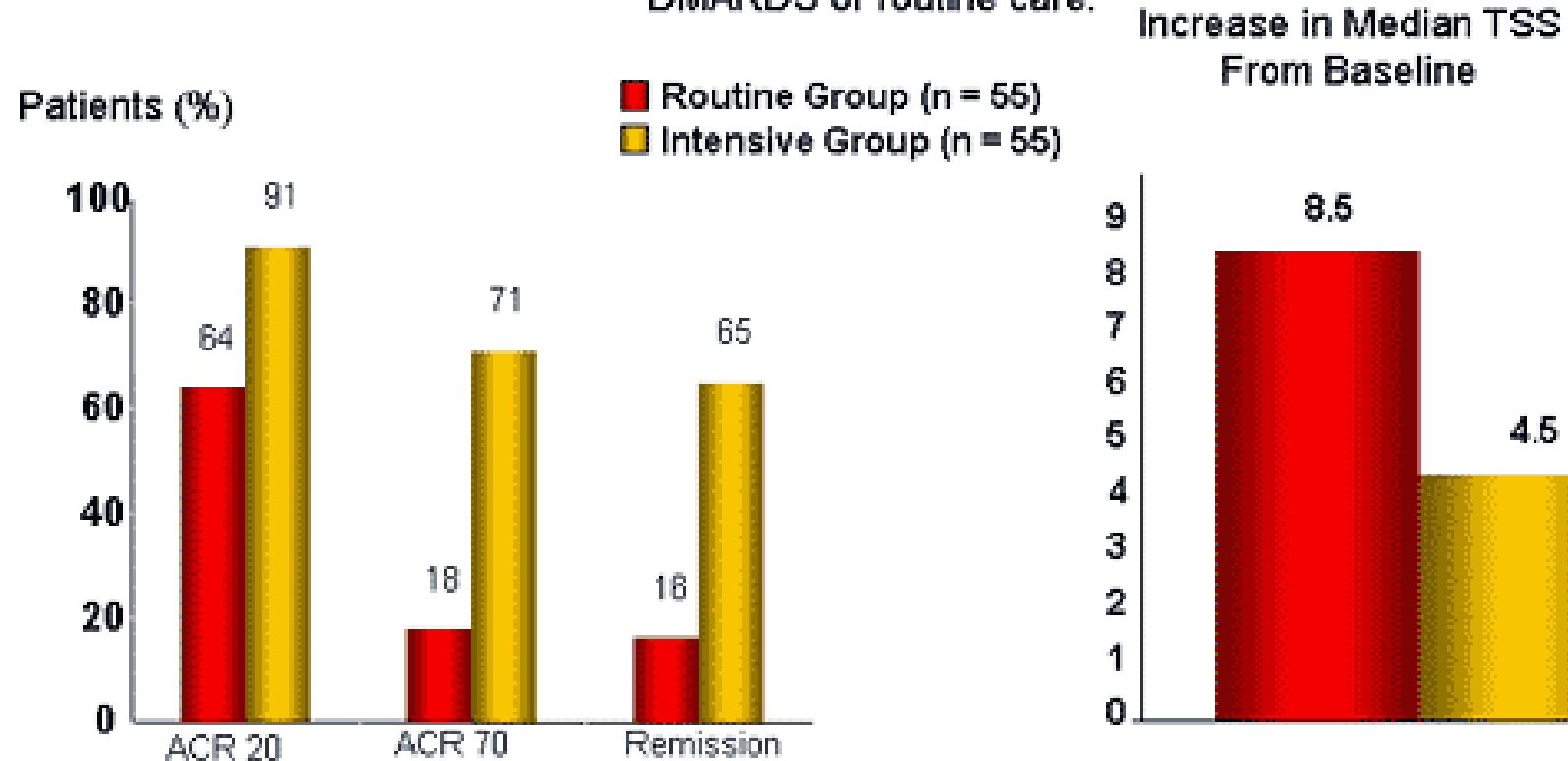
#### "Tight Control" Group

- Monthly visits
- Measure DAS28
- Goal: DAS < 2.4
- IA steroid, DMARD change

Grigor C, et al. Lancet. 2004;364:263-268.

### The TICORA Study

Single-blind, 18-month, controlled trial of 110 patients with RA < 5 years randomized to either intensive management with protocol-based escalation of DMARDs or routine care.



Grigor C, et al. *Lancet*. 2004;364:263-269.

# Shared decision (Συναπόφαση)





**Table 1** Recommendations for the management of rheumatoid arthritis with non-biological and biological disease-modifying antirheumatic drugs.

---

**Overarching principles**

---

- |   |   |
|---|---|
| A | Rheumatologists are the specialists who should primarily care for patients with RA  |
| B | Treatment of patients with RA should aim at the best care and must be based on a shared decision between the patient and the rheumatologist |
| C | RA is expensive in regards to medical costs and productivity costs, both of which should be considered by the treating rheumatologist.      |
- 

**Final set of 15 recommendations for the management of RA**

---

- |   |  |
|---|--|
| 1 | Treatment with synthetic DMARDs should be started as soon as the diagnosis of RA is made |
| 2 | Treatment should be aimed at reaching a target of  |

**Table 1** 2013 Update of the EULAR recommendations (the table of 2010 recommendations can be seen in the online supplementary publication)

### *Overarching principles*

- A. Treatment of RA patients should aim at the best care and must be based on a shared decision between the patient and the rheumatologist
- B. Rheumatologists are the specialists who should primarily care for RA patients
- C. RA incurs high individual, societal and medical costs, all of which should be considered in its management by the treating rheumatologist

### *Recommendations*

1. Therapy with DMARDs should be started as soon as the diagnosis of RA is made
2. Treatment should be aimed at reaching a target of remission or low disease activity in every patient
3. Monitoring should be frequent in active disease (every 1–3 months); if there is no improvement by at most 3 months after the start of treatment, and if the target has not been reached by 6 months, therapy should be adjusted
4. MTX should be part of the first treatment strategy in patients with active RA
5. In cases of MTX contraindications (or early intolerance), sulfasalazine or leflunomide should be considered as part of the (first) treatment strategy
6. In DMARD-naïve patients, irrespective of the addition of glucocorticoids, csDMARD monotherapy or combination therapy of csDMARDs should be considered
7. Low-dose glucocorticoids should be considered as part of the initial treatment strategy (in combination with one or more csDMARDs) for up to 6 months, and then be tapered as rapidly as clinically feasible
8. If the treatment target is not achieved with the first DMARD strategy, in the absence of poor prognostic factors, change to another csDMARD should be considered; when poor prognostic factors are present, addition of a bDMARD should be considered
9. In patients responding insufficiently to MTX and/or other csDMARD strategies, with or without glucocorticoids, bDMARDs (TNF inhibitors\*, abatacept†, and, under certain circumstances, rituximab†) should be commenced with MTX



**Table 2** The 2019 updated EULAR RA management recommendations

	Overarching principles	LoE	SoR	LoA
A	Treatment of patients with RA should aim at the best care and <u>must be based on a shared decision between the patient and the rheumatologist.</u>	n.a.	n.a.	9.7
B	Treatment decisions are based on disease activity, safety issues and other patient factors, such as comorbidities and progression of structural damage.	n.a.	n.a.	9.8
C	Rheumatologists are the specialists who should primarily care for patients with RA.	n.a.	n.a.	9.9
D	Patients require access to multiple drugs with different modes of action to address the heterogeneity of RA; they may require multiple successive therapies throughout life.	n.a.	n.a.	9.9
E	RA incurs high individual, medical and societal costs, all of which should be considered in its management by the treating rheumatologist.	n.a.	n.a.	9.4
Recommendations				
1.	Therapy with DMARDs should be started as soon as the diagnosis of RA is made.	1a	A	9.8
2.	Treatment should be aimed at reaching a target of sustained remission or low disease activity in every patient.*	1a	A	9.7
3.	Monitoring should be frequent in active disease (every 1–3 months); if there is no improvement by at most 3 months after the start of treatment or the target has not been reached by 6 months, therapy should be adjusted.	2b	B	9.3
4.	MTX should be part of the first treatment strategy.	1a	A	9.4
5.	In patients with a contraindication to MTX (or early intolerance), leflunomide or sulfasalazine should be considered as part of the (first) treatment strategy.	1a	A	9.0

AB0324

## SHARED DECISION MAKING IN STANDARD RHEUMATOLOGY PRACTICE: FROM POLICY TO PRACTICE

Y. El Miedany<sup>1,2</sup>, M. El Gaafary<sup>3</sup>, S. Youssef<sup>1</sup>, D. Palmer<sup>4</sup>. <sup>1</sup> *Rheumatology & Rehab, Ain Shams University, Cairo, Egypt;* <sup>2</sup> *Rheumatology, Darent Valley Hospital, Dartford, United Kingdom;* <sup>3</sup> *Community and Public Health, Ain Shams University, Cairo, Egypt;* <sup>4</sup> *Rheumatology, North Middlesex University Hospital, London, United Kingdom*

**Background:** Shared decision making (SDM) is based on setting up a good relationship between the patient and the treating doctor. To accomplish this, we adopted a SDM model based on 3 pillars: a) Presenting choice, b) defining options, and c) supporting patients discover preferences and make decisions. The model is centered on respecting “what matters most” to the patients and respecting their “informed choice”

**Objectives:** To assess 1. The patients’ perception and impact of SDM on drug compliance in RA patients. 2. the cost effectiveness of shared decision making in standard practice.

**Methods:** A double-blind randomized controlled study which included early arthritis patients diagnosed according to ACR/EULAR criteria. The patients were randomly stratified into: Active group (69 patients) who were given a Shared



correlated with changes in PROMIS parameters with significant less contact to the advice line in comparison to the control group. Stopping the DMARDs therapy because of intolerance was significantly less in the active group. The improvement of disease activity parameters was associated with improvement in functional disability and quality of life scores as well as less absence days from work. There was no significant difference on comparing the time taken for discussion with the patient to explain their DMARDs therapy and options available.

**Conclusions:** SDM did facilitate a longer term positive impact on the patients' management. SDM was cost effective as it led to reduced health service use over a 1-year period as well as better patients' adherence to therapy and less number of sick leaves. Furthermore, SDM was not found to be time consuming.

The shared partnership had a direct impact on the patients' management as it allowed the patients to have a better attitude toward their management, self-efficacy/self-confidence which were both correlated with improved clinical outcomes.

**Disclosure of Interest:** None declared

**DOI:** 10.1136/annrheumdis-2015-eular.1410

---

# Με την συναπτόφαση...σε 1 έτος

- Καλύτερος και γρηγορότερος έλεγχος ενεργότητας της νόσου
- Καλύτερη λειτουργικότητα
- Λιγότερες νοσηλείες
- Καλύτερος έλεγχος συννοσηροτήτων
- Καλύτερη συνολικά ποιότητα ζωής



**C. Everett Koop, M.D.**

---

**"Drugs don't work in  
patients who don't take  
them"**



OP0250-PARE

## SHARED DECISION MAKING IN RHEUMATOID ARTHRITIS - PATIENTS/DOCTORS WORKSHOP

E. Kritza on behalf of the Arthritis Foundation of Crete. *The Arthritis Foundation of Crete, Heraklion, Crete, Greece*

**Background:** As in most countries in Greece, medical consultations for RA are too short especially in public hospitals. Therefore there isn't enough time for doctors to educate patients about their disease, to discuss treatment options, to review the side effects and finally to adjust treatment strategies according to their patient's life and priorities.

**Objectives:** After campaigning for change for so many years, we wanted answers to our main questions: a. Do doctors and patients view the importance of Shared Decision Making in the same way b. Is shared decision making possible within the current social, economic and cultural climate?

**Methods:** Two full day mixed workshops were organized to discuss the realities of SDM in Greece today, to share ideas and explore solutions. One in Heraklion on 6/6/2015 involving 30 experienced patients and 6 Healthcare Professionals (4 rheumatologists, 1 GP, 1 nurse, 1 Anesthesiologist specializing in chronic pain).



more time during the first consultation, prepare patients before their consultation for better use of time, recruit trained nursing staff who will be in more active contact with patients and the management of their disease, exploit new technologies for patient data transfer to doctors and vice versa, educate patients and doctors to appreciate the benefits of SDM.

**Conclusions:** SDM allows the patient, to be an equal partner in their health care, working with their doctor, nurse or other health professional to make an informed decision about their treatment. However to be implemented in clinical practice doctors and patients need to be educated.

**Disclosure of Interest:** E. Kritza Grant/research support from: Bristol-Myers Squibb Greece

**DOI:** 10.1136/annrheumdis-2016-eular.3951

# Εμπόδια στην Συναπτόφραση

- Δυσκολία στην επικοινωνία λόγω έλλειψης χρόνου
- Έλλειψη επαγγελματιών υγείας (Νοσηλεύτριες, Γραμματείς)
- Ανεπαρκής επιμόρφωση επαγγελματιών υγείας

# «ΣΥΝΑΠΟΦΑΣΗ στην ΘΕΡΑΠΕΙΑ»



Workshop

ΠΑΤΡΑ

08/04/2017

# Η Κλινική Ιατρική τον 21<sup>ο</sup> αιώνα



EBM (EVIDENCE BASED  
MEDICINE)



T2T (TREAT TO TARGET)



SHARED DECISION



ΙΑΤΡΟΣ - ΝΟΣΗΛΕΥΤΡΙΑ ,  
ΓΡΑΜΜΑΤΕΑΣ - ΑΣΘΕΝΗΣ

Κομβικός ο ρόλος της Νοσηλεύτριας-  
Γραμματέως !!!



# Roles of Nurse Practitioners and Physician Assistants in Rheumatology Practices in the US

DANIEL H. SOLOMON,<sup>1</sup> ASAF BITTON,<sup>1</sup> LIANA FRAENKEL,<sup>2</sup> ERIKA BROWN,<sup>1</sup> PETER TSAO,<sup>1</sup>  
AND JEFFREY N. KATZ<sup>1</sup>

**Objective.** A recent workforce study of rheumatology in the US suggests that during the next several decades, the demand for rheumatology services will outstrip the supply of rheumatologists. Midlevel providers such as nurse practitioners and physician assistants may be able to alleviate projected shortages.

**Methods.** We administered a nationwide survey of midlevel providers during 2012. Invitations with the survey were sent with one followup reminder. The survey contained questions regarding demographics, training, level of practice independence, responsibilities, drug prescribing, use of objective outcome measures, and knowledge and use of treat-to-target (TTT) strategies.

**Results.** The invitation was sent to 482 eligible midlevel providers via e-mail and 90 via US mail. We received a total of 174 responses (30%). The mean age was 46 years and 83% were women. Nearly 75% had  $\leq 10$  years of experience and 53% had received formal training in rheumatology. Almost two-thirds reported having their own panel of patients. The top 3 practice responsibilities described were performing patient education (99%), adjusting medication doses (98%), and conducting physical examinations (97%). More than 90% felt very or somewhat comfortable diagnosing rheumatoid

# Safety and effectiveness of nurse telephone consultation in out of hours primary care: randomised controlled trial

Val Lattimer, Steve George, Felicity Thompson, Eileen Thomas, Mark Mullee, Joanne Turnbull, Helen Smith, Michael Moore, Hugh Bond, Alan Glasper (the South Wiltshire Out of Hours Project (SWOOP) Group)

*Editorial*  
by Pencheon

University of  
Southampton,  
Southampton  
SO16 6YD

Health Care  
Research Unit,  
Wessex Institute for  
Health Research  
and Development

Val Lattimer,  
*research student*

Steve George,  
*director*

Felicity Thompson,  
*project nurse*

Eileen Thomas,  
*principal in public  
health and primary  
care nursing*

Primary Medical  
Care

## Abstract

**Objective** To determine the safety and effectiveness of nurse telephone consultation in out of hours primary care by investigating adverse events and the management of calls.

**Design** Block randomised controlled trial over a year of 156 matched pairs of days and weekends in 26 blocks. One of each matched pair was randomised to receive the intervention.

**Setting** One 55 member general practice cooperative serving 97 000 registered patients in Wiltshire.

**Subjects** All patients contacting the out of hours service or about whom contact was made during specified times over the trial year.

**Intervention** A nurse telephone consultation service integrated within a general practice cooperative. The out of hours period was 6 15 pm to 11 15 pm from Monday to Friday, 11 00 am to 11 15 pm on Saturday,

advice from a general practitioner, together with a 38% reduction in patient attendance at primary care centres and a 23% reduction in home visits was observed during intervention periods. Statistical equivalence was observed in the number of deaths within seven days, in the number of emergency hospital admissions, and in the number of attendances at accident and emergency departments.

**Conclusions** Nurse telephone consultation produced substantial changes in call management, reducing overall workload of general practitioners by 50% while allowing callers faster access to health information and advice. It was not associated with an increase in the number of adverse events. This model of out of hours primary care is safe and effective.

## Introduction

Increasing demands for out of hours care during the

# Απαιτείται.....

- Γνώση
- Διαρκής  
εκπαίδευση
- «Επαγγελματισμός  
»
- ΕΝΣΥΝΑΙΣΘΗΣΗ



