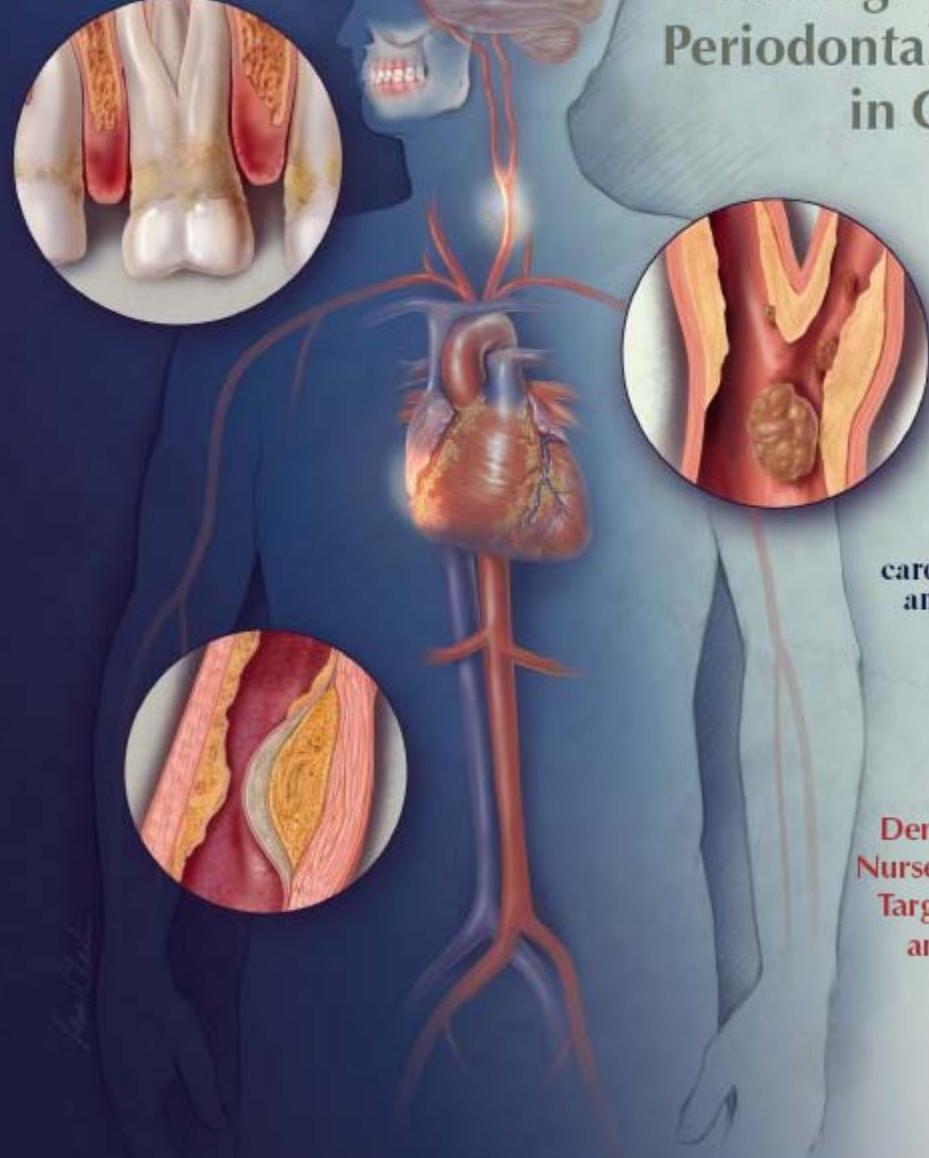


The Oral Systemic Connection

The Significance of
Periodontal Infection
in Cardiology
(3 CEUs)



Chronic
Inflammatory
Periodontal
Disease

A risk factor for
cardiovascular disease
and ischemic stroke?

Strategies for
Dental Hygienist and
Nurse Collaboration in
Targeting Periodontal
and Cardiovascular
Diseases

The Public Knows!

You'd better
know too!

Time Magazine
Feb 23, 2004

Readers Digest
Colgate Marketing



The Legal Profession Knows



Protecting **YOU**
from the negligence
of others

HOME

ORAL & SYSTEMIC DISEASE

ABOUT OUR FIRM

FREE CONSULTATION

CONTACT US

PERIODONTAL DISEASE
HAS BEEN CONNECTED
SCIENTIFICALLY TO
THE FOLLOWING
SYSTEMIC DISEASES

+ **Heart Disease**

+ **Diabetes**

+ **Premature Births**

+ **Stroke**

+ **Other Dental
Malpractice Issues**

+ **Other Medical
Malpractice Issues**

+ **Other Systemic
Diseases**

LOCATION

Contact Mr. Smith at
800-990-7500
FAX Number is 480-990-7860

Smith Law Firm
4310 North 75th Street
Suite A
Scottsdale, AZ 85251

HAVE YOU BEEN A VICTIM?

Contact Us Today
480.990.7500

You may have a case!
Contact us today for a FREE
Case Evaluation!

FREE CASE EVALUATION

Contact David Burnell Smith,
Atty. Today for a free case
evaluation.

name
address me as
e-mail
phone
message

Submit

EXPERIENCED ATTORNEYS

If you or someone you know had periodontal disease,
diagnosed or undiagnosed, and either ignored or treated
unsuccessfully, before or during the same time as any of the
mentioned systemic diseases, you may be eligible for
damages caused by these systemic diseases.

Please complete the contact information or phone my office
for a free consultation. I am committed to providing you with
the expertise necessary to meet your medical and dental
malpractice needs.

At my law office, you, our client, comes first. We will do
whatever is necessary to defend and uphold your legal rights.

PERIODONTAL DISEASE FACTS

- For Diabetics with severe periodontal disease, the mortality rate was 7.5 times risk over normal compared to diabetics with no periodontal disease.
- For Moms with severe periodontal disease, the pre-term, low birthweight babies was 7.5 times risk over normal
- In a research group, the top 25% CRP participants had **2.5 times** rate of colon cancer compared to the bottom 25% CRP group!
- In a research group, the top 1/3 in CRP values had twice the heart attack rate compared to the bottom 1/3 CRP group!

www.meddentlaw.com/

PROTECTING YOUR RIGHTS

PERIODONTAL DISEASE HAS BEEN CONNECTED SCIENTIFICALLY TO THE FOLLOWING SYSTEMIC DISEASES

+ Heart Disease

EXPERIENCED ATTORNEYS

If you or someone you know had periodontal disease, diagnosed or undiagnosed, and either ignored or treated unsuccessfully, before or during the same time as any of the mentioned systemic diseases, you may be eligible for damages caused by these systemic diseases.

+ Diabetes

Please complete the contact information or phone my office for a free consultation. I am committed to providing you with the expertise necessary to meet your medical and dental malpractice needs.

+ Premature Births

At my law office, you, our client, comes first. We will do whatever is necessary to defend and uphold your legal rights.

+ Stroke

+ Other Dental Malpractice Issues

ORAL DISEASE AND SYSTEMIC DISEASE

**+ Other M
Malprac**

**+ Other S
Disease**

Inflammatory oral disease, notably periodontal disease has been associated in the literature to increased risk for Heart Disease, Diabetes, Premature Births, Colon Cancer, Stroke, Macular Degeneration, Dementia, Alzheimer's Disease, Osteoporosis, Duodenal Ulcers, and Respiratory Disease.

PERIODONTAL DISEASE FACTS

- For Diabetics with severe periodontal disease, the mortality rate was 7.5 times risk over normal compared to diabetics with no periodontal disease.

- For Moms with severe periodontal disease, the pre-term, low birthweight, babies was 7.5 times risk over normal

- In a research group, the top 25% CRP participants had 2.5 times rate of colon cancer compared to the bottom 25% CRP group!

- In a research group, the top 1/3 in CRP values had twice the heart attack rate compared to the bottom 1/3 CRP group!

The Medical Profession Knows?

- Information is still early for them
- The oral-systemic connection has been ‘fringe’ until recently. (Remember Paul Keyes, baking soda, peroxide...?)
- Until now, there has been a scarcity of research
- Drug companies haven’t targeted the class of pro-inflammatory mediators or markers
- Until now, P.D. hasn’t been their problem

The Medical Profession Knows

- Awareness and body of knowledge is growing about pro-inflammatory mediators and their sources: cytokines, chemokines, prostaglandins, TNF- α , IL6, CRP, etc.
- Respected research now links P.D. with systemic diseases.
- Moving beyond a “link” and toward cause/effect with double-ended arrows. (Systemic-Oral Connection?)

Numerous studies establish C-reactive Protein as a significant risk factor for CVD

CRP as a Risk Factor For Future CVD : Primary Prevention Cohorts

Kuller MRFIT 1996

CHD Death

Ridker PHS 1997

MI

Ridker PHS 1997

Stroke

Tracy CHS/RHPP 1997

CHD

Ridker PHS 1998,2001

PAD

Ridker WHS 1998,2000,2002

CVD

Koenig MONICA 1999

CHD

Rovainen HELSINKI 2000

CHD

Mendall CAERPHILLY 2000

CHD

Danesh BRHS 2000

CHD

Gussekloo LEIDEN 2001

Fatal Stroke

Lowe SPEEDWELL 2001

CHD

Packard WOSCOPS 2001

CV Events*

Ridker AFCAPS 2001 CV Events*

CV Events*

Rost FHS 2001

Stroke

Pradhan WHI 2002

MI,CVD death

Albert PHS 2002

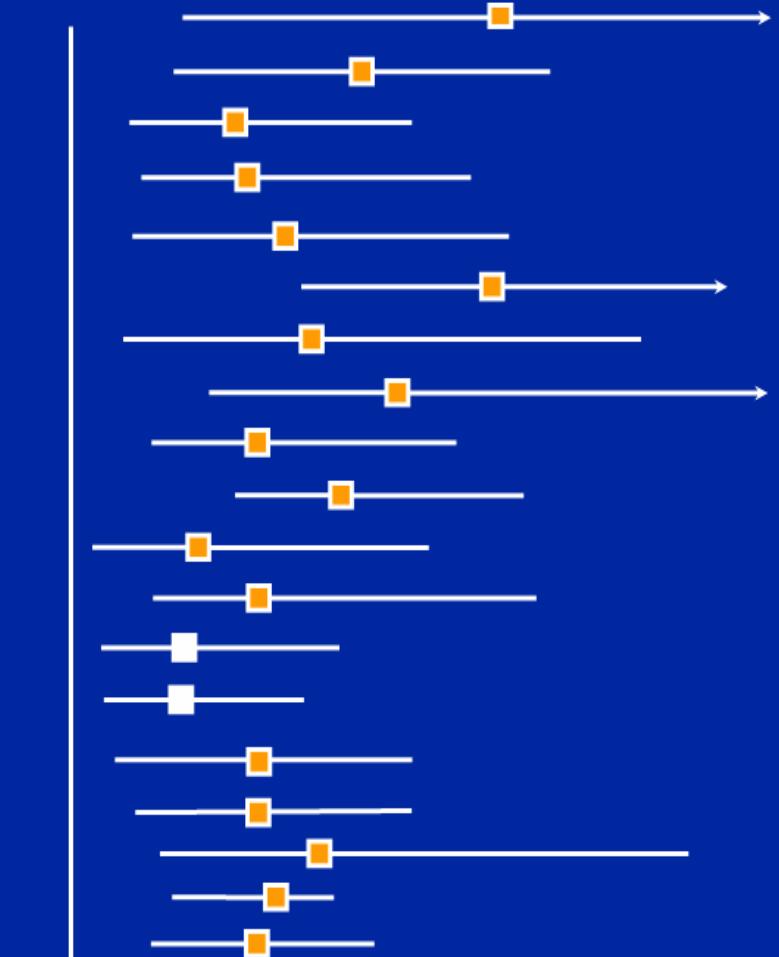
Sudden Death

Sakkinen HHS 2002

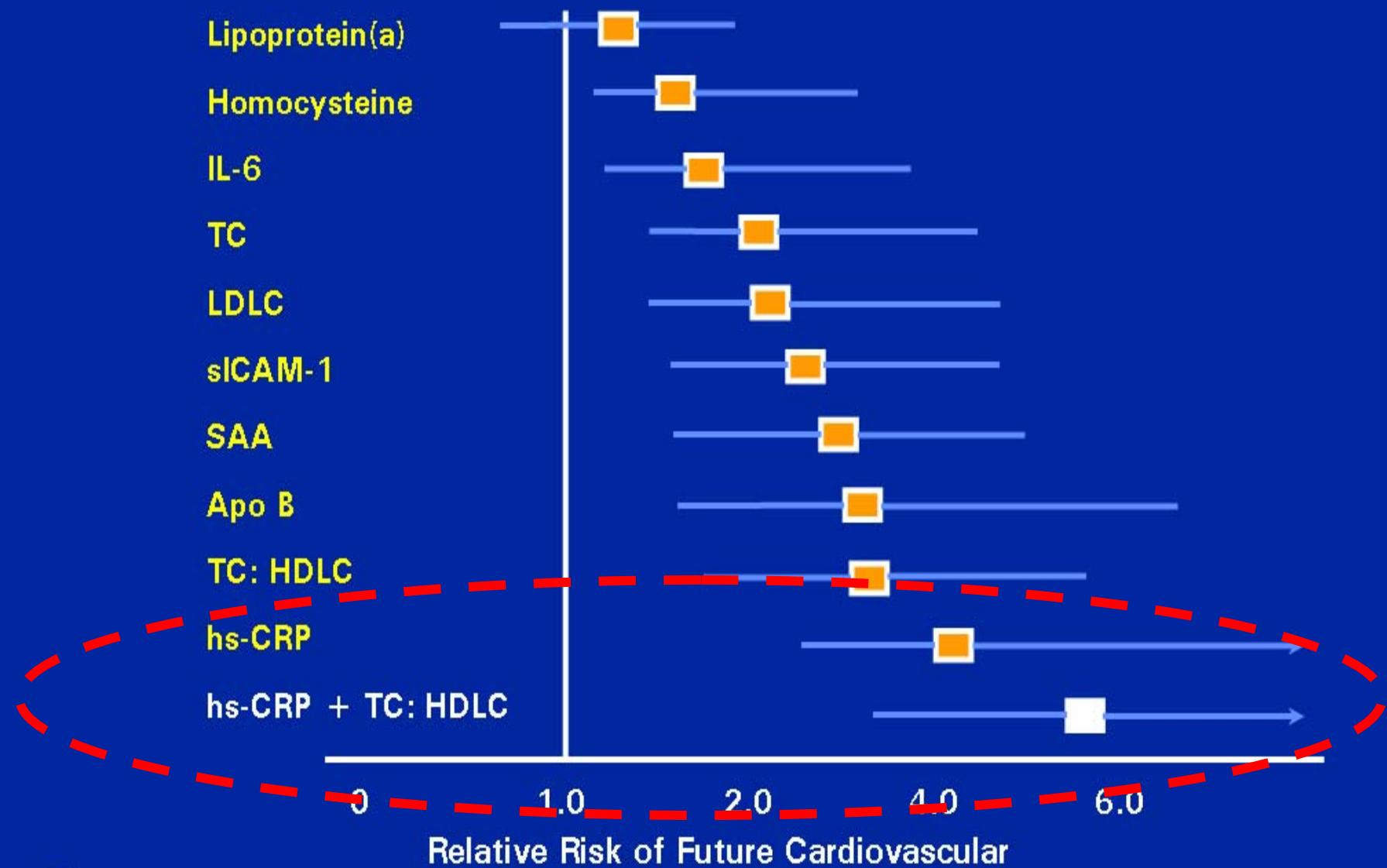
MI

Folsom ARIC 2002

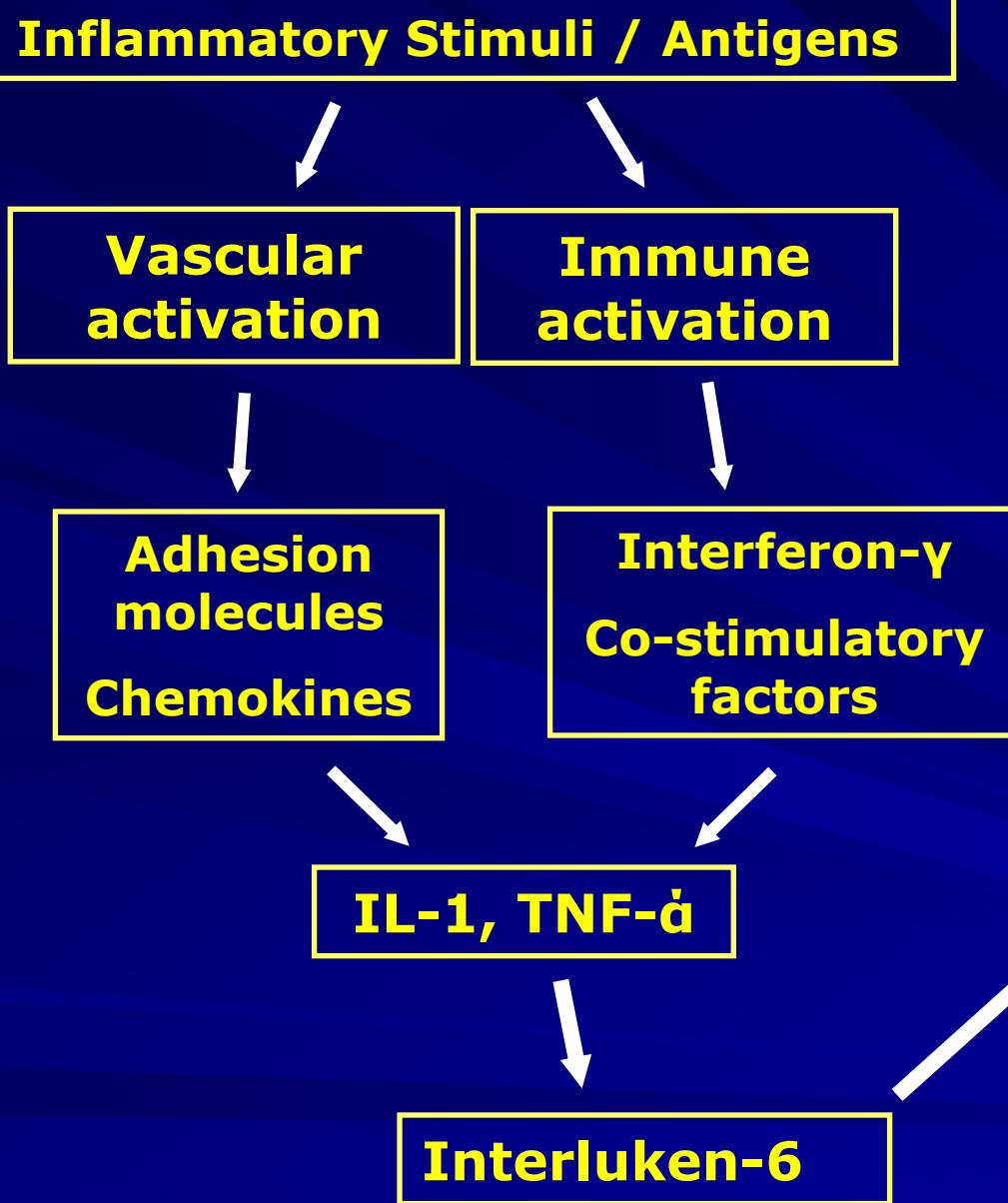
CHD



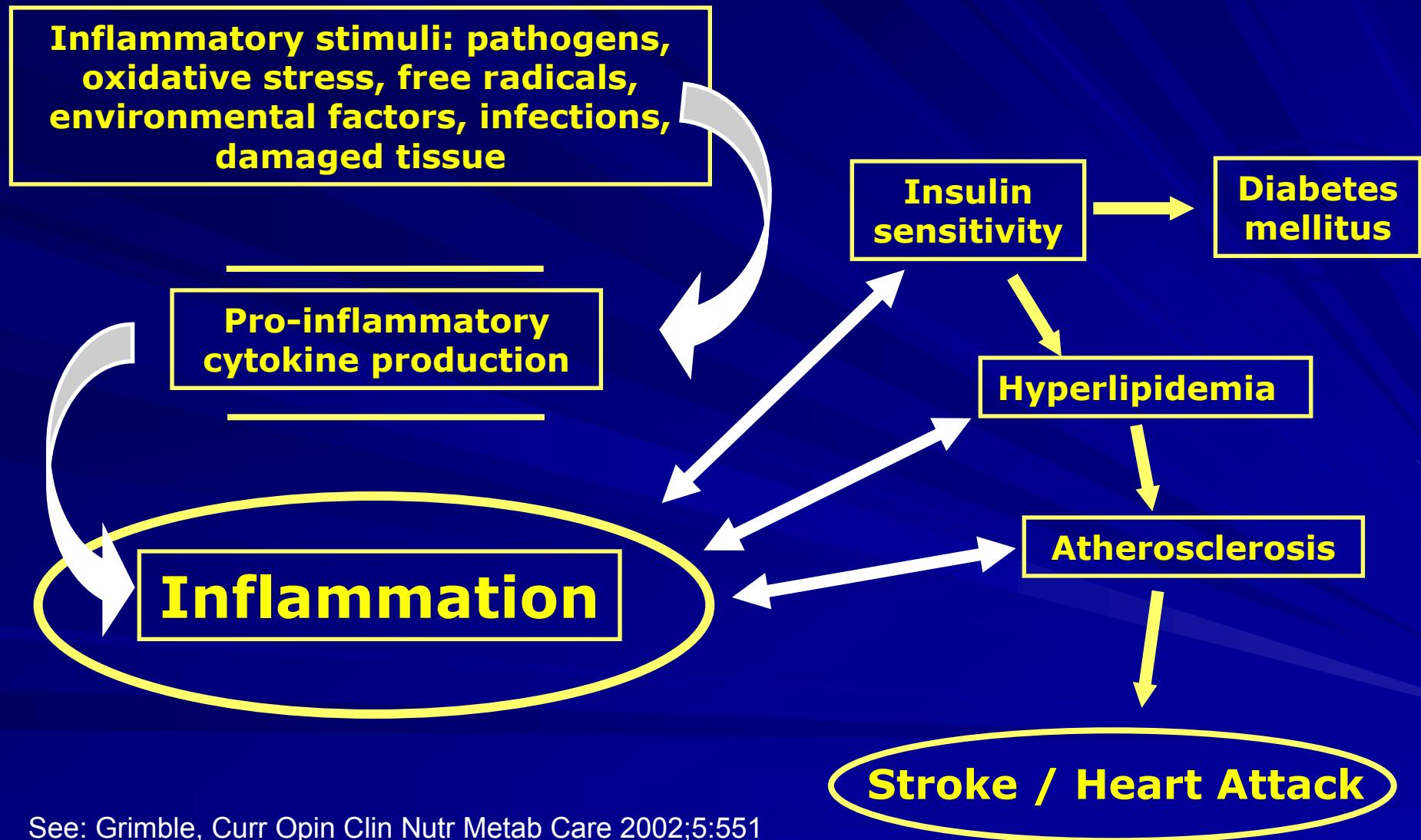
Risk Factors for Future Cardiovascular Events: WHS



The CRP Cascade



Effects of Chronic Inflammation



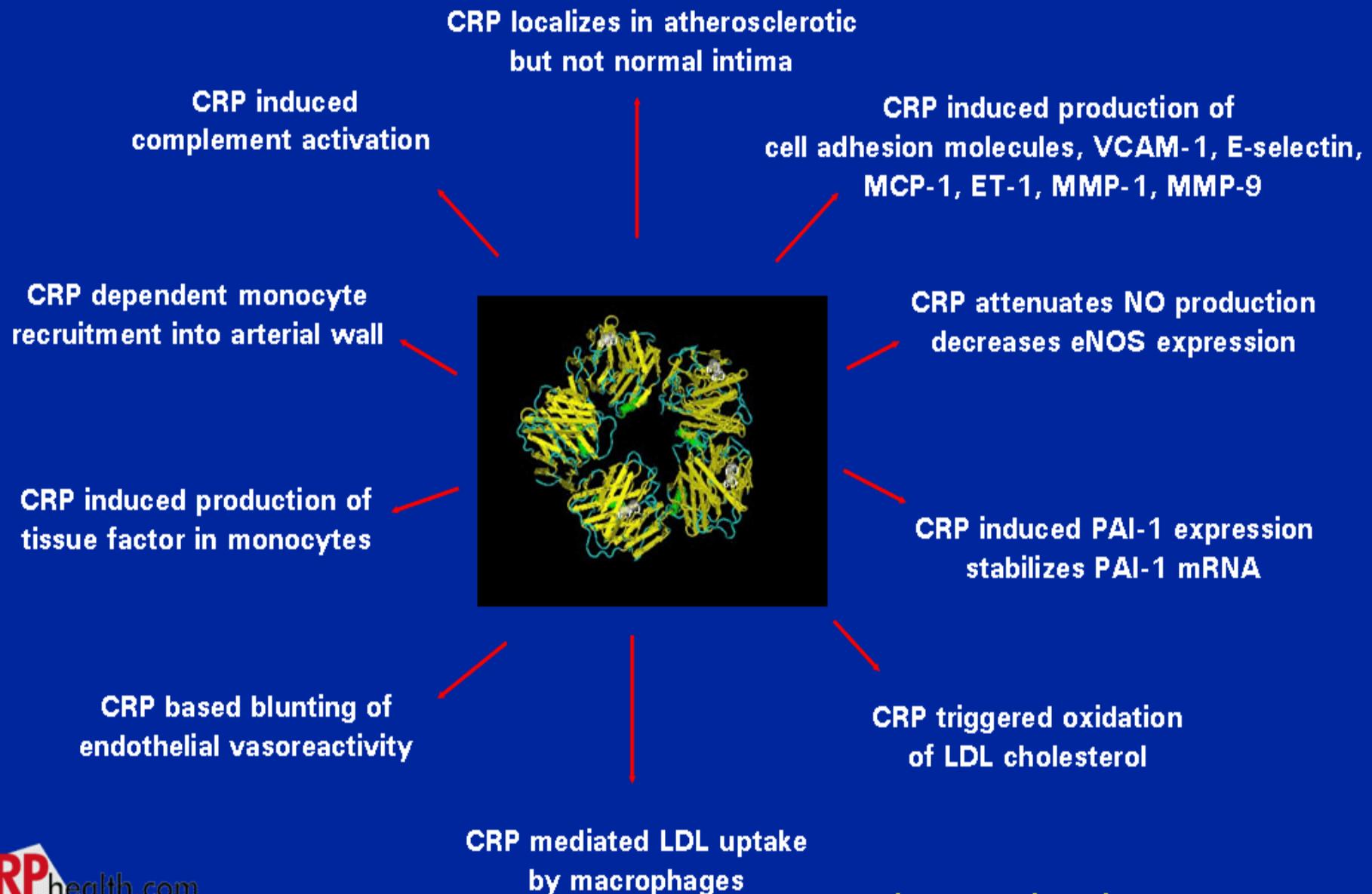
See: Grimble, Curr Opin Clin Nutr Metab Care 2002;5:551

Do atherosclerosis and type 2 diabetes share a common inflammatory basis?

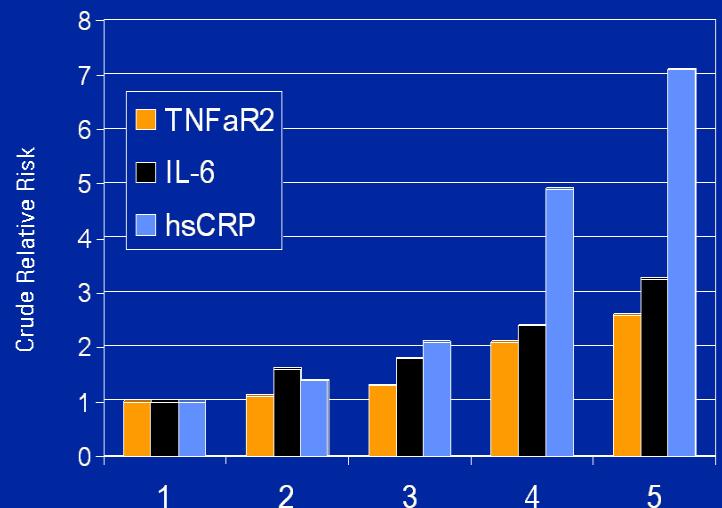
Is there evidence that inflammation *precedes* the onset of type 2 diabetes (implying an integral role for inflammation in diabetogenesis).... or is the presence of inflammatory markers among those with insulin resistance and/or diabetes nothing more than an epiphomenon of the disease state itself?

Pradhan A, Ridker PM. Eur Heart J 2001

More Than a Marker: Does CRP Play A Direct Role in Atherothrombosis?

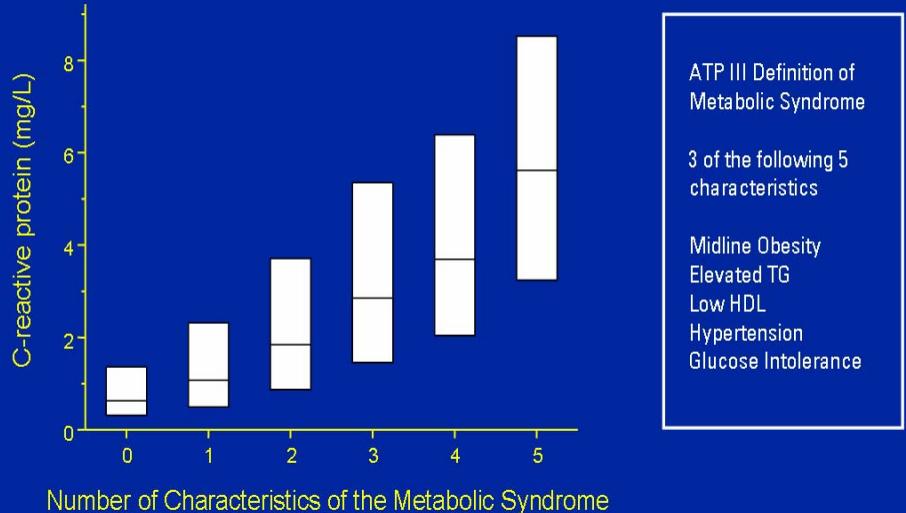


Inflammatory Markers and the Risk of Developing Type 2 Diabetes: Nurses Health Study



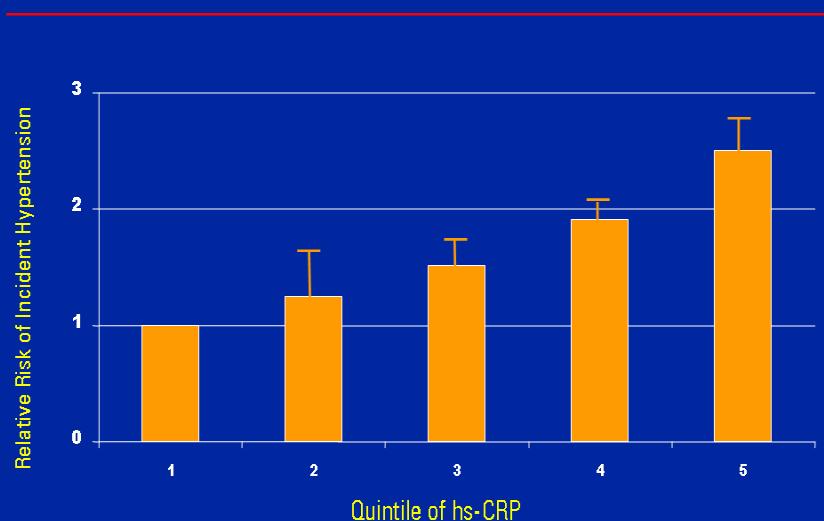
Hu FB et al, Diabetes 2004;53:693-700

CRP Levels Correlate With the ATP-III Definition of the Metabolic Syndrome 14,719 Apparently Healthy American Women



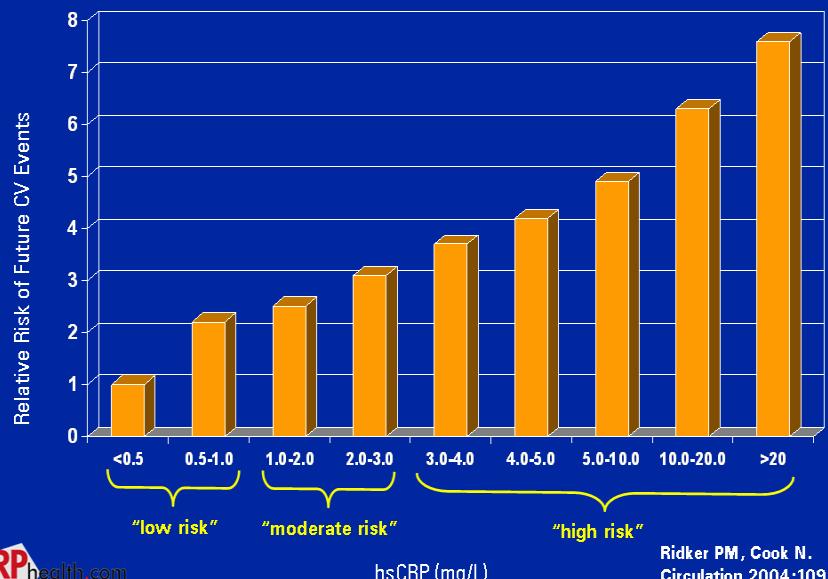
Ridker et al, Circulation 2003;107:391-7

Does CRP Predict Incident Hypertension?



Sesso H et al JAMA 2003;290:2945-51

Clinical Predictive Value of Very Low as Well as Very High Levels of hsCRP



Ridker PM, Cook N.
Circulation 2004;109 (in

Summary: Oral-Systemic Link

- My Opinion -

- Medical profession - slow to uptake & implement.
- Personal injury / medical malpractice attorneys will seize opportunity and compel physicians to deal with P.D. by referring to dentists. This will become “The Big Push!”
- New medical/legal standard-of-care.
- Pro-active dentists who brand & position themselves properly with state-of-the-art equipment, current knowledge, and modern procedures, will benefit most.

Summary: Dental-Medical Link

- My Philosophy -

- Don't make physicians look bad. Edify them.
- Defer/refer management to them (CRP has other sources and is not a solitary risk factor).
- Assume they already have the lab work done. Ask for results and/or give them the option of doing lab work.
- Purpose is to help MDs improve pt care & solve a problem they can't solve without our help.
- Purpose is to help them avoid malpractice & treat their patients better.

Summary: Dental-Medical Bridge

- My Strategy -

- Use every patient as a conduit to their physician.
- Send patient status reports, Med Hx reviews/requests, lab results, progress reports, etc.
- Position as the expert uniquely qualified to treat chronic oral infections. (We're not just "any" dentist !)
- Educate physicians with newsletters, new research summaries, pt. communications, public awareness – ("We know what we are talking about!")

Diagnosis & Case Presentation

- You can't take posture in case presentation until you develop an overall plan and know how you will approach it.
 1. Set Stage – Posture, Belief & Marketing
 2. Pt. Interview - Problem Identification
 3. Explain Philosophy
 4. Diagnose
 5. Report of Findings
 6. Education – Informed Decisions
 7. Prescription – Tell them what to do
- Seven Steps
to Successful
Case
Presentation*

1-

Setting the Stage

The Dentist's Posture

- Get serious. Chronic oral infections have life/death consequences for your patients.
- Legal standard-of-care is shifting. Undiagnosed Perio is already the leading cause of dental malpractice.
- You can't not do this. You can't not say something.
- Establish new state-of-the-art tx protocols.
- We're duty-bound & legally required to diagnose, inform, and prescribe. Do not back down !
- Learn how to “sell”. Make effective case presentations. Learn new verbal skills.

1-

Setting the Stage

The Dentist's Posture

- In dentistry, current standard-of-care lets you manage disease. (These standards will change).
- You don't have to treat at the minimum.
- If Pt doesn't value it, let their MD deal with it.
- Our job - Diagnose, inform, and advise. We are a consultant to our patients.
- Get signed statement documenting you have informed them.
- When they're ready, aggressively treat them.
- Charge for it. Make it something to value.

1-

Setting the Stage

Marketing Philosophy

- Everything we do is marketing! Everything!
- Everything counts!
- If you don't believe it, how will they?
- Positioning doesn't deal with products or services. Positioning deals with perceptions.
What do you want your patients to perceive?
- How will you differentiate yourself from all others floating along on the “sea of sameness”?

1-

Setting the Stage

Marketing Philosophy

- "In our factory, we make lipstick. In our advertising, we sell hope." - Charles Revlon
- "A good ad should be like a good sermon: It must not only comfort the afflicted, it also must afflict the comfortable." -- Bernice Fitz-Gibbon

1-

Setting the Stage

Marketing Plan

■ Internal

- Existing patient education and diagnosis
- Newsletters
- Friends & Family referrals

■ External

- Media – press release, display ads, advertising, news stories, radio/TV, etc
- Professional Communications – newsletters, patient status reports, fax blasts, literature, etc.
- Outbound marketing – Muffin runs, expos, events, cross promotion, joint-ventures, etc.

2-

Pt. Interview – Identify Problem & Values Clarification

- # 1 Rule: You can't sell a solution to someone who doesn't have a problem. Get their problem!
- Key = Active Listening – Ask lots of questions. “Please tell me why you’re here.” “Ah-huh” “How do you mean exactly?” “Is that right!” “And then what happened?” “How would that make you feel?” “What would happen if....” “What’s important to you about your teeth?” “What would it cost you to not have your teeth?” “Are you worried about ...?” “Would it concern you if ...?” “If you had a chronic infection in your body that could lead to a heart attack or stroke or diabetes, would you want to know about it?”

“If you must speak, ask questions” – Omer Reed

2- Pt. Interview – Begin Paradigm Shift

1 Patient Answer: “I don’t want to loose my teeth or get dentures, unless I have to,” or “I want to keep my teeth as long as I can.”

- “How do you feel about your nose, elbow or other body parts? Do you want to keep them as long as you can too?”
- “If you found out that you didn’t have to lose your teeth, how would that make you feel?”
- “Sounds like you’re here to save your teeth... Are you prepared for the financial investment that might require?”
- Flushes out insurance (not ‘major-dental’ or a pay-all), the “yea-but’s”, and the “...unless I have to...” conversations.
- Let’s be honest and admit that for some people there are other things in life that are more important than the health of their teeth and gums – things like Christmas, vacations, cars, trucks, boats, recreation, etc.

3-

Explain Your Philosophy

- After you've heard about their problems, complaints and requests, tell them you'll
 - do an exam
 - get objective information about their problem
 - see if they have other problems they should know about, and
 - then make some recommendations about how to solve their problems, and those you discover.

3-

Explain Your Philosophy

“But before we do...”

- “You may have heard about us already, but let me take a moment and tell you a little about us. This will help you understand how we'll look at your situation and how we can help you solve these problems you've described.”
- Describe your philosophy and the difference between old-school “Disease Medicine”, and your modern “Wellness Medicine”.
- Define the benefits to them and how it will cost them less and improve their health more.
- Disease is costly – wellness isn’t!

4-

Diagnosis

- Examination thorough enough to allow you to discuss any problems that you discover.
 1. Periodontal probing
 2. Bleeding scores
 3. Restorations – failing, ill-fitting, etc.
 4. Phase contrast microscope
 5. Mouth odor

5-

Report of Findings

- “When you advertise fire extinguishers, open with the fire.” - David Ogilvy
- Most buying decisions are emotional. Your case presentations should be too.
- “The chief merit of language is clearness, and we know that nothing detracts so much from this as do unfamiliar terms.” – Galen, 129-199
- Practice good verbal skills to create word pictures. Give accurate report and create lots of emotion.
- Use photos, intra-oral pictures, brochures, etc.

5-

Report of Findings

- “How long have you had that infection?”
- “That would be gross if you took some of this puss and wiped it onto a soda cracker and ate it!
 - Did you know that’s like what happens every day with this cottage cheesy bacteria stuff growing around your teeth and gums.”
- “This smells like something crawled in there and died. Do you ever wonder what other people think when you talk with you – like at work, with a client, a friend, or with your spouse or lover?”

5-

Report of Findings

■ “Your best friend might tell you if you stepped in dog poop, but they probably won’t tell you when you have bad breath. Well ...I’m not your best friend yet, and these germs have been pooping around your gums, leaving them full of puss and the stuff that makes that rotten smell that others won’t tell you about, except when they offer you a breath mint....”

5-

Report of Findings

- “If puss ever came out from under your knee-cap, would that concern you?”
- “If you washed your hands, and your skin started bleeding, would that concern you?”
- “If you combed or brushed your hair and you noticed blood on your comb, would you be a little worried?”
- “Bleeding gums means you have an infection, with flesh-eating bacteria and their poisons eating their way under your skin, getting into your blood stream and possibly damaging your heart, brain, lungs, blood vessels, and bones (and if pregnant, your baby). Would that worry you?”

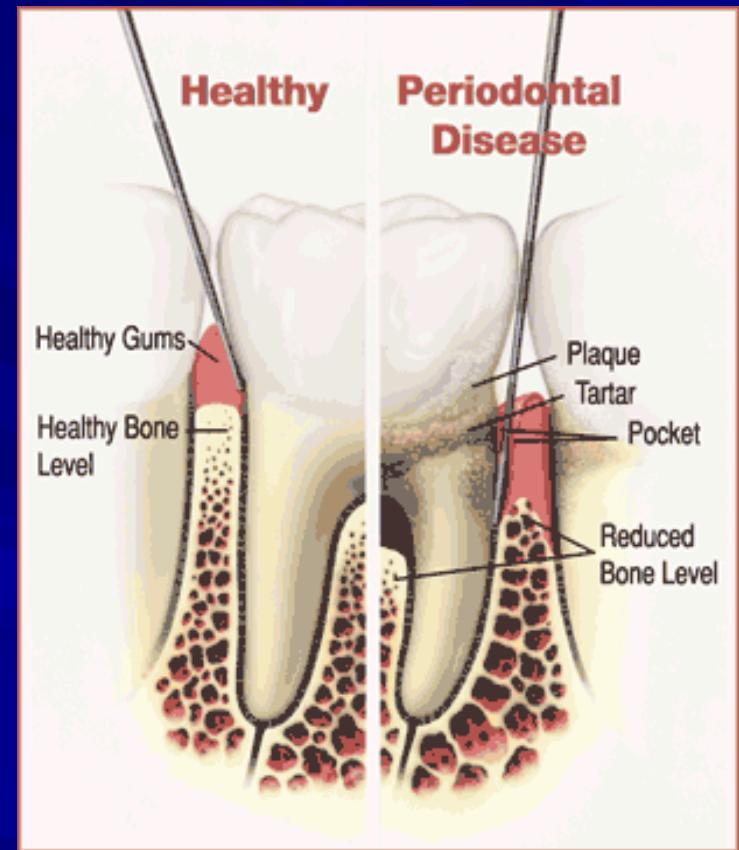
6-

Periodontal Disease Education

- Periodontal disease is an inflammatory reaction to a chronic bacterial infection that affects the gums and bone supporting the teeth.

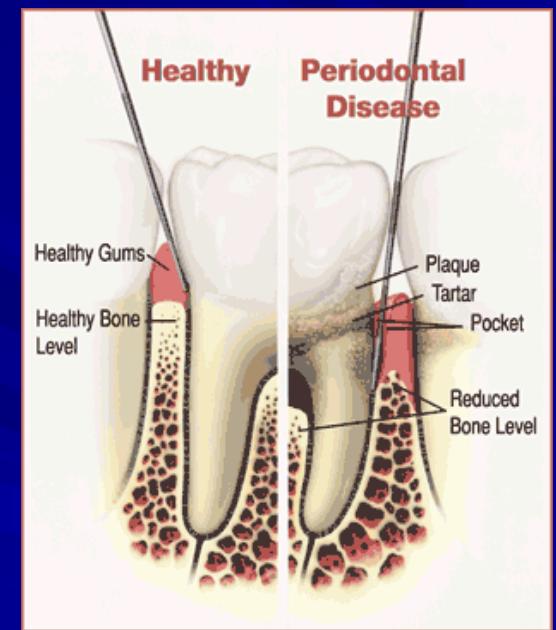
“Perio” = around

“dental” = tooth



6- Periodontal Disease Education

- If you don't keep bacteria under control, the body must try to defend itself with an immune system response beginning with inflammation.
- Your gums begin to look at your bacteria covered tooth as a foreign object.

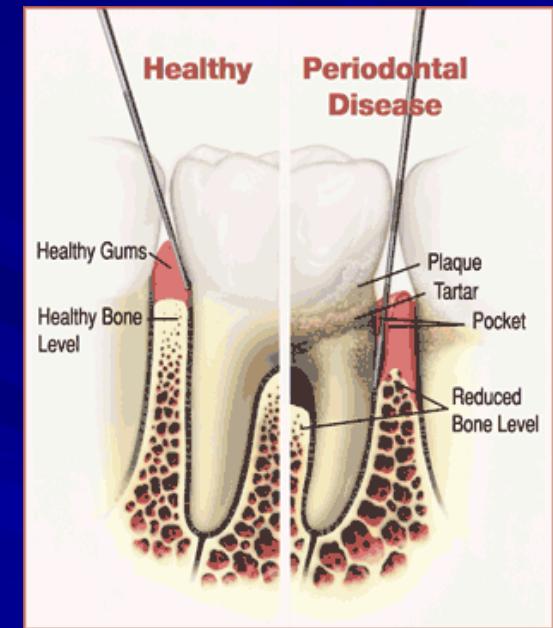


6-

Periodontal Disease Education

- Think of a splinter embedded under your skin. If you can't remove it right away, the body starts an inflammatory process to defend itself from this foreign object. The skin around the sliver festers up with puss and inflammation until it expels the object from the body.

- The same phenomenon happens around dirty teeth.



6-

Consequences of Periodontal Disease

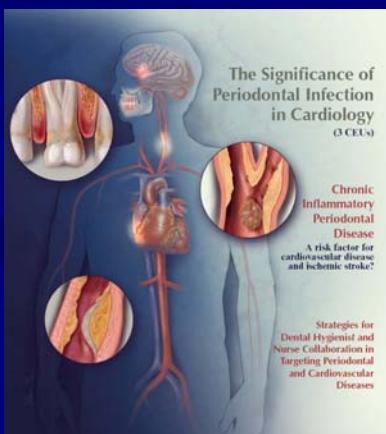
Bacteria and their by-products enter blood stream and spread freely through the body

Bacteria grows below the gum line. Toxins irritate gum tissue & start an inflammatory response

Connective tissues and supporting bone break down and degenerate

Heart disease, stroke, osteoporosis, lung disease, blood vessel damage, pregnancy complications, etc.

Gums are infected & pull away from teeth, bone dissolves, gum pockets deepen, teeth loosen, breath stinks, etc.

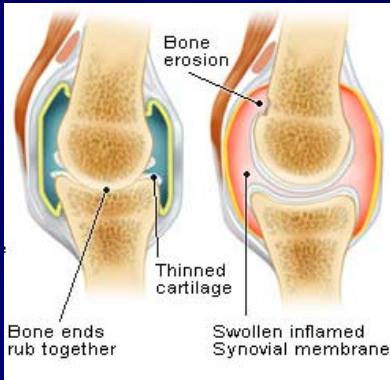


6-

Periodontal Disease is Linked to:



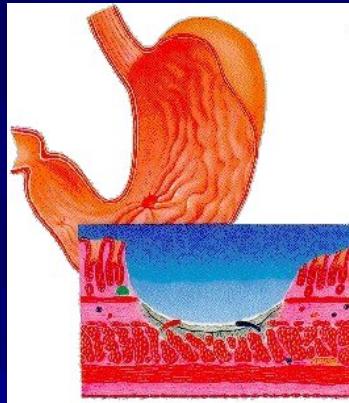
Osteoporosis



Arthritis



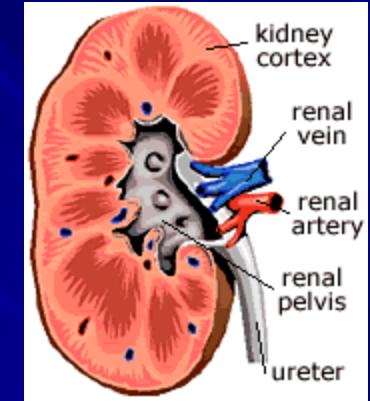
Pregnancy Complications



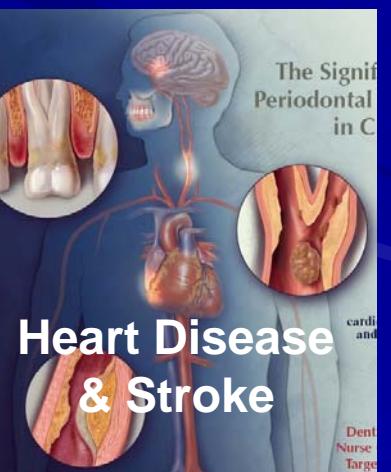
Ulcers



Diabetes



Kidney Disease



6-

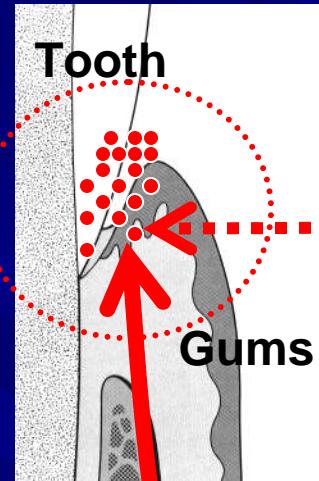
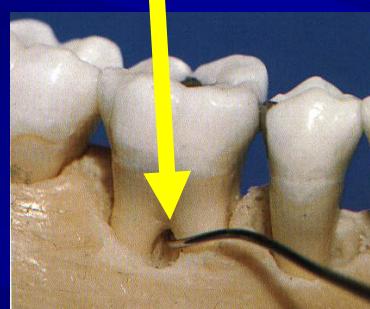
Periodontal Disease Education



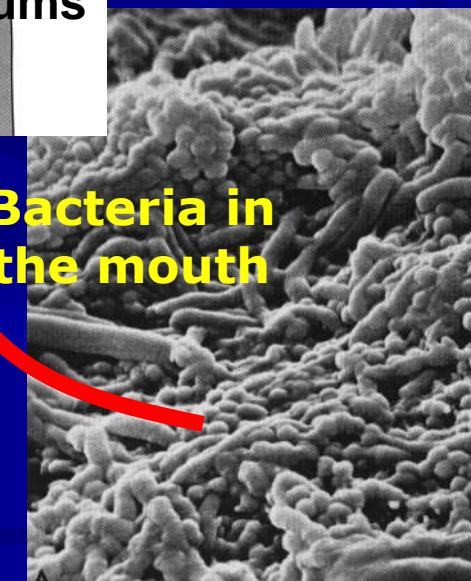
Results of tooth loss



Bone Loss



**Inflamed Gum
Attachment**



**Bacteria in
the mouth**

6-

Periodontal Disease Education

Early signs of gum disease & bacterial inflammation are determined by:

- Bleeding gums
- Soft, or tender, or red, or inflamed, or boggy gums

Remember ...

If the gums bleed, bacteria is entering
the blood stream!

7-

Prescription & Closure

- Describe options: (Remember – keep your posture!)
 1. No treatment (dismiss)
 2. Refer to periodontist - surgical tx will lower gums around teeth. (This still may be necessary in refractory cases).
 3. Tissue Therapy Program – SRP, laser, anti-microbial, nutrition, behavior modification, smoking cessation
- Make recommendation for treatment.
- Work out financial arrangements. (2/3 or 3/4 the cost of traditional surgery).
- “Our culture and insurance industry says it’s okay to lose your teeth. Some people know the price of everything and the value of nothing.”

7-

Center for Dental Medicine Tissue Therapy

- Scaling and Root Planing (SRP) - removes calcified tartar and calculus around the gum line.
- Anti-microbial Rinses – kills bacteria and creates an unfriendly environment for bacteria.
- Laser Therapy - a non-surgical – removes diseased gum tissue, endotoxins and bacteria, and repairs gum pockets.
- Accelerated Home Care – daily support of health with anti-microbial rinses and pastes and new hygiene techniques.
- Nutritional Therapy – provides important ingredients to repair connective tissue, lower inflammation, and support health.



Special Considerations Existing Patient - Active

How do you talk to an existing active patient with problems?

- “It looks like we are beginning to develop some problems here ...”
- “What we’ve been doing just doesn’t seem to be working ...”
- “We generally try to be as conservative as we can initially, but we must get more aggressive if we find our efforts aren’t enough.”



Special Considerations Existing Patient - Active

- Must be “face-saving” and graceful.
- Often they have failed while under care of periodontist, or your recare program.
- If they’ve followed professional recommendations, they may believe what they are already doing is enough to prevent further problems.
- Usually, the SRPs, cleanings, etc has already been completed. Just add the remaining CDM protocol steps and adjust fee accordingly.



Special Considerations Existing Patient – Not Active

- Talk about relapse - “while you were on vacation, the bacteria moved in”.
- With absence of recommended recare interval, good home care, use of oral hygiene devices, and nutrition products - the “promise” is gone.
- Take posture and ask if they are serious about obtaining health, keeping teeth, and preventing systemic complications. If not, consider referring them to periodontist, dismissing them, and referring to medical doctor for evaluation of risk factors.