Society of U. S. Naval Flight Surgeons

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PRESIDENT'S COLUMN

Having just returned to the Office on the first workday of 1990, after nearly 2 weeks of leave, I reluctantly started shuffling through a crowded "in-box", which was perfectly clean earl ier. The front cover of the latest issue of APPROACH jumped out at me. The cover's caption said, "What I did during my summer vacation!" Having just returned from the beautiful island of Antigua, I'm now inspired to tell you **what I did during my 1989 Holiday leave period.** ..but first, you will have to wade through some FS stuff!

At the top of the in-box heap is a letter from the detailer. He is asking me to review the AirLant claimancy billets, (all 77) then prioritize to see which ones we can afford to gap as the Navy comes up roughly 110 flight surgeons short this year (I assume you know the history behind the shortfall for the next year and a half and so will not elaborate). I can't think of anything more gastric retching than discussing gapped FS billets. But the fact of the matter is, I must decide where the least impact will occur for 7 additional losses!

And for you honorable, steadfast and dedicated flight surgeons out there absorbing salt spray, I earnestly ask for an additional two or three hours a week for the next year or so to help us see this crisis through. Or whatever it takes. All the same work will be there waiting -sick call and the potpourri of aeromedical duties. You will have to do some prioritizing yourself as to what you will be expected to accomplish. I shudder at the thought of leaving aeromedical/squadron support duties undone, especially in light of all the mishaps the Navy has run up against this year...and I loathe the thought of not attending the sick as well. ..for people working sick can just as easily cause an accident just as much as not doing our preventative duties. Therefore, I beg your additional indulgences and longer working hours that we can keep our aviators aviating safely. We all will have to work harder and smarter. If you brainstorm some ways to make the job easier, then please, by all means share that with us.

Speaking of FS duties, I would be remiss not to call to your attention a recent mishap involving self-medicating and flying. The pilot's serum, (he failed to survive the out-of envelope ejection), showed 5 times the therapeutic serum level of antihistamines. We are all mature enough to know that pilots do self-medicate (hopefully without our blessing). But there is one significant fact about this - we always learn about it posthumously. In all my years as an operational FS, I can't recall ever having learned about the toxicology reports revealing self-medication in a live pilot. Its always the dead ones and we can't rip their wings off. **The point being, we need to do more air-crew educating.** As you all know, it isn't just the medication, but the underlying disease which, sometimes, is even more important! The real tragedy in the above case is that the pilot took two others with him, and severely injured the 4th. Did the medication cause the accident - we may never know - the aircraft wasn't recovered? But it did happen coming off the "cat" - which is bad enough with a clear head even if/when something doesn't go wrong!

Okay, "What I did over the holidays" -or "Where I spent Christmas Leave'" How many of you can put your finger on a very tiny spot on the map, pointed to the small island of ANTIGUA? AirLant owns asmall support facility on this island - (about 300 miles southeast of Puerto Rico). There is one medical officer; CDR Tom Anderson (also a FS whose last tour was the Enterprise) and 2 IDTs. If anyone is interested in taking a MAC C-141 hop out of Charleston, SC, going to Antigua and giving Tom a break for a few days, there are only 70 active duty personnel, so you will have time, I can guarantee, to really enjoy "a little bit of Paradise". More "fun in the sun" than your wildest dreams could ever imagine! Tom will let you use his house, his car, windsurfer, snor-

keling equipment, and membership card to the world's most exclusive vacation resort! When you are ready, give me a call, or CDR Anderson at (AV) 854-1110 - ask the Patrick AFB operator for extension 486 on Antigua (it is very easy to get thru on autovon).

Work Hard, Maintain your Enthusiasm, don't Despair over the Rough Times Ahead - things will eventually get better. Our terrific aviation outfits are depending on you, whether they know it or not!

Plan for May's (13-17th) AsMA meeting. I want to see you in "Naw Lans, Leesiana"!

CAPT GEORGE E. HILL
ComNavAirLant Code 018
Norfolk, VA 32511-5188
AV 564-7028

SECRETARY-TREASURER NOTES

The Aeromedical Problems Course last October was indeed a huge success, and SUSNFS is proud to co-sponsor this informative meeting. In addition to attending some excellent lectures, it provided many individuals with the opportunity to directly renew their interest in our society by updating their dues status. Also, there were numerous others who signed up as new members.

I am pleased to report that at the mid-year point, October 30th, our organization was in a solid financial standing. A special thank you is extended to all who have faithfully maintained a current dues status, which significantly contributes to our solvency. Regretably, there still remains nearly 44% of the members in our roster who have not paid dues for the current fiscal year. Please take note of the number in the first line of your address label which indicates the year in which dues expire. The current annual dues remain $10.00 for both members or subscribers, and lifetime dues at $200.00.

Now is the time to begin making definite plans to attend the annual AsMA Scientific Program which will be held at the Marriot Hotel in New Orleans, Louisiana, 13-18 May, 1990. The SUSNFS annual meeting will be held on Sunday, 13 May.

CDR M.R.VALDEZ
NAMI CODE 32R

IN DEFENSE OF THE NAMI-WHAMI

There are two types of difficult decisions in life - one where you don't know all the facts, can't interpret the facts, or have no precedent to use in the decision process. The second type is where you have the facts, know the precedent, but are unwilling to bite the bullet. As flight surgeons we are all torn between doing the job we were trained to do and being the squadron GOOD GUY. NAMI has a mission to handle the first type of problem-we have the expertise, patience and ,past medical record to make the tough calls. Too many times we are forced to make the second decision and thus we become the BAD GUYS.

It was brought to my attention at the recent Problems Course that AVT's are often told to send flight physicals **they** know are incomplete, not physically qualified or otherwise in error simply because their flight surgeon said, "Send it in," So, we will send it back, as expected, or mark it NPQ, as expected, and the NAMI-WHAMI strikes again. Come on, guys, give NAMI a break. We don't set the physical standards or the regulations, the line does. We just enforce them.

I feel we have a kinder and gentler NAMI than in the past. We solve a lot of problems over the phone, we are willing to reevaluate both patients and decisions, and in most cases we take the extra time to explain why we did what we did, As a result, the number of Congressional Inquiries is markedly down. We still keep the unqualified out of aviation, which is also in our mission, but we try not to make enemies. If you feel intimidated by a SG-III XO who wants to be SG-I on his annual, "Send it in"; but don't be surprised when it comes back SG-III, just like your AVT said it would.

CAPT R. K. OHSLUND, MC USN
CO, NAMI

CODE 42 SPEAKS

We are currently in the midst of a great deal of change in the physical qualifications arena. The new ManMed Chapter 15 is in the works which should be out within the next few months. This should be a much easier and more sensible document to use in your day-to-day aviation medicine operation. I'm sure there will still be controversy, but I think that, on the whole, you will find it is more current and useful than the old Chapter 15.

BuMed had done away with annual aviation physical examinations (finally) and are now doing these examinations triannually with interim annual aeromedical evaluations. It will consist of a brief history of check off section, minimal vital signs, visual acuity, auditory acuity, height, weight, body fat percentage, and a brief pertinent physical evaluation section. The history section is minimal and does not replace a good thorough problem oriented history by the flight surgeon. There is room on the form for appropriate amplification of history if needed. The decision has been made not to include any routine laboratory work. However, if you, as the member's flight surgeon feel lab work is indicated, by all means order

what you feel is appropriate. Individuals who have waivers, 0-6 and above, and those 40 and over still require complete annual physicals with NAMI Code 42 submission. The triannual aviation physical still needs to be submitted for our endorsement. This should decrease your overall administrative work load a great deal.

As soon as the new Chapter 15 goes to press, I'll start working on a new flight surgeons' quick reference guide. It should be out before the summer.

Local boards of flight surgeons are being held much more often and returning personnel to flying expeditiously pending our recommendations on waiver requests. This is commendable, and is saving aviators down time. However, as I've said before, a LBFS is not an excuse for doing something stupid!! On 4 December, 1989, we received a copy of a 23 May,1989 physical and a local board done on 5 July, 1989. The board was sent to us for information only and was not accompanied by a waiver request. The individual is an aviator who had significant ear surgery and is scheduled for more surgery in mid-1990. The following is quoted from the board:

> "We find the SNO NPO but AA for Diaco SG-1 and temporarily waiver the condition. ..This temporary waiver will expire May 1990 ...A permanent waiver will be submitted after the follow-up operation. .."

There are several things wrong with this board. The most glaring being the "granting" of a waiver by the LBFS. There is no such animal as a local board waiver! Only NMPC can grant this man a waiver. We have never received a request for a waiver, and in fact we received the original of the May 1989 physical on 28 June 1989 finding the member NPQ with no request for a waiver. Based on that physical, we endorsed his physical as NPQ, waiver not requested, not recommended, and NMPC concurred on 15 September 1989. Thus the man is grounded effective 12 May, 1989.

But wait, there's more! The man and his flight surgeon are currently deployed and the man is flying as if he has a waiver. Imagine his surprise when he finds out that his flight pay stopped on 20 November (180 days from his date of incapacitation)! And who is he going to blame? Why those dirty little NAMI Nazis, of course. I'm sure every aviator on that ship will hear about how NAMI "slam-dunked" this aviator and caused him to lose his flight pay! Will the flight surgeon correct this man's misperception and defend NAMI?

This man was due for his annual flight physical in October, but we have yet to see his paper work or a request for a waiver. Please, please, please don't do dumb things in the name of a LBFS that are going to get you, me, and most importantly an aviator in trouble.

CAPT DICK WEAVER, MC USN
NAMI Physical Qualifications,
Code 42

FROM THE FLEET

FLIGHT SURGEON'S PRE DEPLOYMENT CHECKLIST

Part of the "gauge" for any nugget flight surgeon is learning what type of materials to bring on deployment. Lt Steve Matson, my CAG-9 counterpart, and myself have formulated this pre-deployment checklist:

One month prior to deployment:

1. Squadron corpsman to initiate immunizations and HIV blood draw with the goal of 100% operational readiness.

2. Flight surgeon's hospital credentialing committee to forward his complete and current credentials packet to the Administrative division of ship's medical department.

3. Complete all pending medical workups and make all final dispositions on squadron personnel. This should be done preferably prior to POM period (two weeks prior to the actual deployment date).

Two weeks prior to deployment:

1. Double check that above are completed.

2. Squadron corpsmen not authorized to take leave beyond this time period.

One week prior to deployment:

1. Squadron corpsmen to have current LOI list of all personnel to deploy for health record inventory prior to pack-out.

Squadron corpsman responsibilities for actual pack-out:
1. All medical and dental records.

Flight surgeon responsibilities for pack-out:

1. Check to insure all squadron corpsman duties carried out.

2. Appropriate reference textbooks, e.g. Aviation Medicine, Ophthalmology. Otolaryngology, Interrlal Medicine, Ambulatory Surgery, Orthopaedics and NAMI handouts and notes.

3. Sample formats for mishap investigations,FNAEBs, and Human Factors Boards.

4. Pocket reference mishap investigation text.

5. Flight gear if not flying aboard.

6. Ensure he is scheduled on the manifest.

7. Flight surgeon's quick reference guide.

LT JOHN HIPSKIND, MC USNR
Carrier Air Wing 9

"TYPICAL" NAVAL AVIATOR

1. I recently participated in a Special Board of Flight Surgeons at NAMI for one of my pilots. The initial diagnostic dilemma involved episodes of loss of consciousness which were difficult to distinguish from a syncopal vice seizure etiology. As I am at a fairly isolated duty station, my local experts were Army Neurologists at the only military tertiary care center within 3,000 miles, and they differed in their opinions on the case. After conducting a Local Board of Flight Surgeons, we found her NPQ but AA due to the questionable nature of these events and recommended evaluation by a Special Board of Flight Surgeons which was subsequently approved.

2. During the intensive and extensive evaluation at NAMI, there developed a previously unknown factor. The medical studies were essentially inconclusive, with normal physical, laboratory and provocative examinations as to the etiology of the events. She was diagnosed as having "Loss of Consciousness, unknown etiology, probably cardiac in origin". However, the Psychiatry Department, in their battery of written and verbal analyses, discovered an ambivalence toward returning to flying status on the part of this pilot. There was definitely a component of fear involved, an anxiety over the possibility of a recurrence of these episodes. Of greater importance, though, was the elicitation of the admission that she had other interests in her life, primarily an upcoming marriage and a strong religious faith. She conceded, after much discussion, that aviation was her job, and not her life. She felt she could be happy not returning to flying and therefore be able to more actively pursue these other interests. Much energy was spent in analyzing the possibilities of malingering, conversion reaction or factitious disorder, but the psychiatric diagnosis excluded those and believed her to have "a physicial condition with psychological overlay". The consensus of the Board eventually was to find herto be NPQ but AA for: 1) Three episodes of Loss of Consciousness, Etiology unknown, Recurrent, CD (Waiver Not Recommended) b) Psychological Factors Affecting Physical Illness, CD (Waiver Not Recommended), and recommended reevaluation at one year's time.

3. The particular point on which I wish to comment is the fact that this was a female aviator. I am the flight surgeon for the Navy's largest *squadron, having an augmented personnel count of almost 800 people (due to our transitioning to a new airplane, while attempting to maintain our mission of providing 24-hour airborne communications capabilities in the Pacific arena). Out of almost 150 officers, approximately 10 percent are females and about half of those are pilots (7/16). In respect to the entire Navy therefore, I believe I have a relatively large sample of female aviators from which to draw some preliminary observations. (There are 222 Naval female aviation officers of which 150 are Pilots.)

4. During the very thorough Psychiatric examination to which I early alluded, there arose a discussion of the MMPI or "phychological profile". The psychiatrists commented that it was "Normal", though it had a relatively high "defensive scale". Under the circumstances, however, having been examined, poked, prodded and physically stressed for 10 days by over a dozen doctors with a flying career at stake, this was not felt to be significantly important. The question then arose, as to whether enough data had been accumulated forthereto be a female equivalent of the "typical (**male**) naval aviator". The answer was negative.

5. I believe that to be very important. We, as physicians, have seen this difference in our own profession. Women traditionally choose particular medical specialties. (PEDS, PSYCH, OB), work fewer hours, earn less money, chair far fewer departments, and engage in less research and academic medicine than their male counterparts. Why? The majority admit that they are still the primary child-raisers and home-makers in their marriages regardless to whom they are married, physician, professional or otherwise. It's an individual choice, for each woman or couple, and I don't belittle that fact. But the evidence is clear in our own profession that women chose different professional options due to a multitude of factors - societal, biological, emotional, personal or motivational. They continue to function as physicians in an equal capacity in their chosen fields and are not absolved of any medical responsibilities to performance of such. However, their very choice often dictates their subsequent lifestyle and practice style.

6. As the number of female aviators grows, I ask you to consider this difference in your evaluation of them from what we were taught at NAMI to be the "typical Naval Aviator". I believe there will evolve a psychological profile of a female Naval Aviator which differs from that in present use. This phenomenon has arisen in the medical profession as the number of female doctors has grown, and I believe it will arise in aviation as our experience grows there. I am not implying that they should be absolved from performing their duties nor not held accountable for their actions or choices. Most female aviators are highly motivated and provide exemplary work in their fields. The choices they make along their career paths however, will probably differ, in an as of yet unknown way, from that which we observe presently.

*Operational

LT JENNIFER RUH, MC USNR
VQ-3

IN MEMORIAM

The following is a poem read at the dedication ceremony for the Hancock County (Illinois) Vietnam Memor-

ial, 1 July, 1989

This quote is from the cover letter written by CAPT Bruce Jackson MC USNR:

"I felt something akin to compulsion to write this poem. As I wrote it, I had in mind not only my childhood friend but several others killed over there, including Bill Ricker, a flight surgeon classmate from Class 118 who was shot down in a Marine T A-4 shortly after arriving in Vietnam. Today, far too few of us even know about Bill, but he would have been one of our most enthusiastic (and colorful) leaders if he had come back to take the aeropsace medicine residency and stayed on active duty, as he had planned."

THE FALLEN TORCH

by
Bruce W. Jackson
CAPT MC USNR

These precious golden flames,
once so bright,
sparkled with life,
glowed with the promise of youth.

Now, they burn no more.

These precious golden flames,
once so bright,
were blown out by a random gust
from the raging winds of war.

Those of us who also served,
over there,
are, to this day, haunted by a question:
Why them? Why not me?
Why them? Why not me?
We know, all of us,
that only silence ever will answer;
yet we also know, all of us,
that the question will linger with us
till our own embers grow cold.

Is there nothing, then, but sorrow and despair?

No! No! We must cry out, "No!"

We, the survivors,
We, whose hearts once were warmed
by the glow from these precious flames,
We - We - must find a way:
to cherish their memory,
to honor their nobility
And, above all,
to carryon for them, somehow,
the promise of their youth.

We who remember them at the golden setting of the sun,
it is we who must find away
to pick up the fallen torch
of the promise of youth.

We must.

We must.

RAM'S CORNER

GIARDIASIS

More than 100 cases of watery diarrhea in the month beginning 24 July 1989 were reported from the USS Coral Sea, by L T K. S. Hunter, FS in a telephone conversation on 22 August. Giardia cysts were identified in stool and in bottled water from Alexandria. The initial infection is suspected to have originated in Cannes or Marseilles, with a secondary outbreak in Alexandria, continuing through portcalls in Ismara and Naples. A ready-room survey with 100% participation from the airwing, revealed 30 officers, and 50-100 enlisted to have symptoms, with a similar number among the ship's company.

The PDR was of limited use. Current recommendations in the Merck Manual, Goodman and Gilman, and Conn's Current Therapy are for quinacrine (Atabrine) 100 mg tid x 5 days, with a 70-95% cure rate, with GI disturbances, headache, dizziness, vomiting, discoloration, exfoliative dermatitis, and rarely, toxic psychosis as the side effects. Flagyl is not FDA approved, but is widely used, is as effective or nearly as effective, better tolerated, but may cause nausea, dark urine, and disulfiram-like reactions with alcohol. It should not be administered in pregnancy because of possible teratogenicity, but its carcinogenicity is low to negligible. Flagyl (metronidazole) may be given in doses of 250-750 mg tid for 5-7 days, 10-14 days or as a 2 Gm dose one time. Retreatment may be required with either medication, and for Flagyl a treatment of 21-28 days may be utilized. Furazolone (Furoxone) is available as a suspension, and is therefore preferred for children, with cure rates of 77-92% reported. It too can cause Antabuse-like reactions.

Some would advocate treating all cohabitants, but careful surveillance of symptomatic patients and test of cure is probably adequate, with good hygiene and sanitation. Current BuMed policy mandates downtng aviation personnel for the duration of treatment, hence one dose therapy may be advisable in an operational setting, especially for critical personnel. Down status certainly should continue while severe diarrhea symptoms persist. My original recommendation, concurred in by LCDR G. Hayes of NAMl lnt. Med., was that for operational necessity, DIF might be appropriate after symptoms remitted, and DIACA after symptoms remitted and 3 days of treatment, with pilots closely monitored, and treated for 5-7 days, with the results thoroughly documented for dissemination and publication. The matter has been presented to the Aeromedical Advisory Council, and further decisions will be detailed.

CDR DENNIS E. DEAKINS, MC USN
Resident, Aerospace Medicine

WAIVERS, LOCAL BOARD OF FLIGHT SURGEONS AND TOTAL QUALITY MANAGEMENT

Individualizing aviation physical standards to our avia- tor population via the waiver process is the premier clinical expertise of the flight surgeon. Since waivers directly affect both operational availability and flight pay, they draw the aviators attention fast. Demonstrated waiver competence is a quick way to increase your credibility with the line; Alternatively, waiver packets disappearing into cracks in the system undo your credibility, and make all flight surgeons and Nami into

"THE ENEMY"

The medical decision to recommend a waiver of aeromedical standards involves a large commitment to both the patient and the system. To the patient, it requires a considerable allocation of time, energy and expertise to take a history, examine the patient, and obtain appropriate consultations. These factors then must be integrated into a concise aeromedical summary, the patient educated, and the packet forwarded via his commanding officer with appropriate briefing. The commitment does not end there. The waiver should be tracked through NAMI, NMPC/CMC and back to the squadron with a copy to his health record. Finally, the waiver may have continuing requirements including laboratory follow up, specialist consultations and annual submission back to NAMI. When you recommend the waiver, you are committed to those requirements.

The Loca.l Board of Flight Surgeons (LBFS) offer an even more potent capability, immediately returning an aviator to flight duties pending review by NAMI and NMPC/CMC. A well thought out report from LBFS offers an indepth aeromedical review of the patient and his condition. There are times when putting the aviator back in the cockpit now is appropriate, but good medical judgement must prevail. A LBFS requires more commitment than a waiver process, simply because returning the aviator to flying immediately is a stronger statement of his capability.

Since waivers and LBFS have the most potential for adverse aeromedical outcome, a total quality management approach would dictate careful monitoring of these functions. Some problems have been noted which include:

1. Apparentfailureto forward LBFS report to NAMI via the squadron CO. An Aviator flying when his LBFS report has been lost in the paperwork shuffle is unsatisfactory, yet several such cases have been noted.

2. Extensive delay in forwarding the waiver or providing additional information requested by NAMI.

3. Transferring aviators with waivers pending.

4. Submitting LBFS recommendations for applicants.

Tracking personnel with waivers is important. A card file system maintained by your best AVT is suggested, though the innovative may employ a computer filing system. The basic workup and diagnosis should be included, as well as the dates of command waiver submission, NAMI action, and NMPC/CMC action. Dates for required follow up should be documented. This system will assist you to provide the best aeromedical support for your aviators.

After an aviator has received a waiver, it is inappropriate to find him (or her) "physically qualified and aeronautically adaptable." Instead he (or she) would be "aeronautically adaptable but not physically qualified for (DIACA/DIF) due to (medical condition) with waiver granted by (NMPC/CMC) on (date)." Similarly, an aircraft mishap investigation report would note he "possessed current physical examination and physiological training, with post mishap medical evaluation noting (medical condition) for which (NMPC/CMC) had granted a waiver on (date). This medical condition (was/was not) felt to be contributory to the mishap."

As the Commanding Officer's aeromedical safety officer and aeromedical readiness advisor, you as the flight surgeon have an integral role in the squadron mission and function.

You are the aeromedical expert.

CDR BRUCE K. BOHNKER, MC USN
Resident, Aerospace Medicine

NAVAL AVIATION PHYSICAL EXAMINATIONS

The traditional annual checkup has been a popular preventive health care measure for decades. Efforts to determine a scientific basis for the routine physical examination of an asymptomatic adult have resulted in a series of papers published by the Canadian Task Force, the American Cancer Society, the United States Preventive Service Task Force, and doctors PaulS. Frame and Stephen J. Carlson. All of these researchers applied contemporary epidemiologic standards to the traditional components of a physical exam. Their recommendations are summarized and compared in the 1989 Scientific American, chapter VIII Preventive Health Care.

Those components of the periodic exam which the researchers agreed should be included were: blood pressure checks, breast exams, mammograms after age 50, Pap smears, and fecal occult blood testing. Frame did not recommend rectal examinations for either colorectal or prostate cancer screening. Frame also did not recommend routine pelvic examinations, except for Pap smear testing. Neither Frame nor the Canadian Task Force recommended routjne sigmoidoscopy for colorectal cancer screening. The American Cancer Society recommended those cancer screening interventlons even in the absence of supportive data. Two interventions not recommended by any of the researchers were chest x-rays for lung cancer screening and tonometry for glaucoma screening.

Many traditional components of a physical exam have been shown to be ineffective in screening for asymptomatic disease. Recognition of this and concern for the wasted hours spent performing examinations have helped spur the pending changes to chapter 15 of the MANMED. The examinations we do for occupational or aerospace medicine should be intended to screen for fitness to accomplish specific jobs and should not be mistaken for health maintenance screening.

CDR DAVE Hiland, MC USN
Resident, Aerospace Medicine

DIABETES MELLITES

Diabetes mellites (DM) is diagnosed by a fasting blood sugar (FBS) > 140 mg/dl on two occasions, a value> 2 SD above the population mean, therefore very specific, but insensitive. The oral GTT is more sensitive, but may lead to overdiagnosis, problems obtaining insurance, and anxiety. Ingesting> 150g carbohydrate for the preceding 3 days, fasting 10-16 hrs., a glucose challenge of 75g is administered to adults, with a FBS, and glucose determinations at 1/2, 1 and 2 hours. No caffeine or nicotine are allowed prior to or during the test, which is an ambulatory test, during which the subject should remain quietly seated (bed rest causes glucose intolerance, and exercise may induce additional changes). It should be repeated if it is abnormal, as the test is poorly reproducible, with a mean difference at 1 h of 26 mg/dl and 2 h of 20 mg/dl. Glucose tolerance is impaired if FBS > 140 and any value exceeds 200. DM is diagnosed if 2 H > 200 and any other value 200. In the impaired, 1-5% become diabetic each year. A disparity of interpretation of about 50% was found in 20 diabetologists, therefore it should not be used to diagnose DM.

Glucose nadirs in 650 "normal" asymptomatic patients before and during testing found a mean of64 mg/dl,10% < 47,2.5% < 39, considerably overlapping patients with "hypoglycemic symptoms." Therefore, the GTT is unreliable and should not be used to diagnose reactive hypoglycemia. The hypoclycemic index (decline of plasma glucose over 90 minutes before nadir/nadir value) is also of no value. Hypoglycemia is rarely found during "hypoglycemic symptoms," (weakness, dizziness, nausea, tremor, hunger, headaches, sweating and/or difficulty concentrating). A GTT is not indicated in the workup, but a FBS should be obtained, during symptoms if possible.

Signs or symptoms compatible with hypoglycemia developed in 23% of patients with symptoms and 25% of controls near the glucose nadirduring GTT. After mixed meals there was no hypoglycemia, but 14 of 18 patients had symptoms or signs. The "hypoglycemia threshold" varies widely, and patients with symptoms should have a glucose, and evaluation of nicotine, caffeine, weight, thyroid, and stress factors. Hypoglycemia is not a disease or diagnosis, but a symptom.

Refs:

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CDR DENNIS DEAKINS, MC, USN
Resident, Aerospace Medicine

RICHARD E. LUEHRS MEMORIAL AWARD

Once again, it's time to nominate the outstanding Flight Surgeons in Operational Aviation Medicine practice for the Luehrs Award. The message is on the street to the TYCOMS. POC at NAMI is CAPT E. J. Sacks, AV 922-2657 or 3938. Drop dead date for submissions is 9 April 1990.

This is a tough call because so many of you are doing a dynamite job.

CAPT C. I. DALTON, MC USN
NAMI, Code 32

NAMI, CODE 32

Congratulations to our selectees for the Residency in Aerospace Medicine beginning in the Summer 1990. They are:

CDR Thomas A. Hawley
CDR John W. Mills
LCDR Richard A. Beane
LCDR Jeffrey R. Brinker
LCDR Gerald Scholl

I would like to personally interview each of you planning to apply for 1991. This can be accomplished at the Aerospace Meeting in May, the Aeromedical Problems Course in October, or anytime that you're in Pensacola. The last two options are preferable. Please drop a note to me when you send in your application (under separate cover).

CAPT C.I. DALTON, MC, USN
Director of Training, NAMI

-- EDITORIAL POLICY--

The views expressed are those of the individual authors and not necessarily those of the Society of U.S. Naval Flight Surgeons.

This Newsletter is published quarterly by the Society on the first of January, April, July and October. Material for publication is solicited from the membership and should be typed **double spaced,** reaching the Editor at least one month prior to the scheduled date of publication. Unsigned material will not be considered.

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