

ROSE[®]RESOURCE
Reinsurance Outcomes and Service Experts

Volume 11 • Number 4 • Fourth Quarter 2001

Reactions to trauma:

Appropriate treatment fosters return to normal function

By Tim Lang, PsyD and Mark Raderstorf, M.A.

The attacks on September 11, 2001 sent a shock wave across the nation that continues to send ripples of anxiety far beyond the epicenters of the attacks in New York, Washington, D.C., and Pennsylvania. Images of mass destruction have been broadcast repeatedly in the media as heart-rending news footage and still photos are etched indelibly into the minds of Americans young and old. Every American has experienced a sense of loss and increased vulnerability. To further complicate the situation, headlines since September 11 are filled with items that continue to renew the public's anxiety and fear — war, bombings, security alerts, anthrax, and bio-terrorism have become daily fare in the news media. Many Americans are now more emotionally fragile and the mental health delivery system is being strained in a way that has never occurred before. We have received numerous calls from customers inquiring about appropriate forms of treatment for acute stress disorder and post-traumatic stress disorder (PTSD). This article addresses the common symptoms of PTSD, and various forms of treatment for anxiety disorders available to individuals who may have been affected by the events of September 11, 2001.



viduals exposed to this type of trauma develop PTSD.

The symptoms, initially considered quite normal, become a significant mental health concern if they continue approximately 30 days after the event. It is important to note that the normal grieving process cannot trigger PTSD. For example, experiencing the death of a loved one does not sufficiently meet the criteria for a traumatic event. While it may lead to a short-term depression or temporary feelings of sadness, the loss of a loved one is a common human experience and, therefore, does not meet the criteria for PTSD.

One core symptom of PTSD is recurring, distressing recollections of the event in question. Often, nightmares, images, thoughts, and even a sense of reliving the experience occurs. Words, smells, or sights that remind the individual of the event can spark these recollections. Another symptom of PTSD includes a persistent avoidance of surroundings or sensations associated with the event. Withdrawal, feeling detached, and a sense of hopelessness are also common reactions. These reactions to the trauma often lead to poor sleep, decreased concen-

IN THIS ISSUE:

- 1 *Reactions to trauma:* Appropriate treatment fosters return to normal function
- 2 *Achieving Optimum Outcomes:* Customizing Treatment for Patients with HCV Infection
- 4 Directory of ROSE Staff
- 6 Provider Repricing

PTSD is an anxiety disorder that can ruin relationships, affect occupational functioning and, in more extreme cases, lead to thoughts of death or completing a suicide. For a PTSD diagnosis, the patient must witness or be a victim of an event that seriously threatens their physical well-being or livelihood and is outside the normal experience of most individuals. Approximately one in four indi-

Continues on page 5

Achieving Optimum Outcomes: Customizing

The following is the Introduction from the monograph, "Achieving Optimum Outcomes: Customizing Treatment for Patients with HCV Infection," published by Projects in Knowledge.

Introduction

Chronic hepatitis C virus (HCV) infection is a potentially serious and costly disease that warrants treatment in all eligible candidates. Fortunately, dramatic advances in the treatment of chronic HCV infection have been made in the past couple of decades. Moreover, with the introduction of pegylated interferons, physicians are now at the threshold of new improvements in treatment that will, for the first time, allow the majority of HCV-infected patients to achieve sustained viral eradication without reducing the safety or tolerability of treatment. Sustained response rates to peginterferon in combination with ribavirin are higher than response rates seen to date, and strategies for customizing treatment regimens and maintaining patients on therapy will improve these rates even further.

Why Treatment of HCV Infection Is More Important Than Ever

Each year, 36,000 individuals develop new HCV infections in the United States.¹ Without effective treatment, approximately 85 percent of infected individuals will develop chronic hepatitis, 20 percent will progress to develop cirrhosis, 6 percent will progress to hepatic decompensation, and 4 percent to hepatocellular carcinoma.² HCV-related chronic liver disease accounts for 40 percent of all cases of chronic liver disease in the United States, and 8,000 to 10,000 deaths each year. It is the primary

indication for liver transplantation,¹ and people with HCV infection currently consume at least \$15 billion worth of medical care annually.³

Of greatest concern is that the incidence of advanced liver disease secondary to HCV infection is increasing, despite the fact that the rate of new HCV infections has decreased by 80 percent since 1989.¹ This is because patients infected with HCV during the 1970s and 1980s, the peak incidence period, have now been infected for approximately 20 years, during which time chronic infection in these individuals was slowly progressing toward advanced liver disease. Davis et al⁴ estimate that from 1998 to 2008 the rate of cirrhosis will increase 61 percent, decompensation will increase 279 percent, and hepatocellular carcinoma will increase 68 percent. The demand for liver transplants will increase 528 percent, and liver-related deaths will increase 223 percent. (See Table 1.) By 2018, rates of HCV-related disease are expected to peak, with decompensation 4.3-fold higher, demand for liver transplants 7.7-fold higher, and liver-related deaths 3.6-fold higher than in 1998.⁴ Furthermore, a research report by Dulworth et al³ indicates that without effective curative treatment, total healthcare costs associated with HCV infection will peak in 2021 at about \$26 billion per year (in 2000 US \$), and that US employers will lose billions of dollars in HCV-related disability losses.

Table 1. Estimated Increases in Advanced Liver Disease

Secondary to HCV Infection, 1998 to 2008.

Condition	Increase (%)
Cirrhosis	61
Decompensation	279
Hepatocellular carcinoma	68
Demand for liver transplants	528
Liver-related deaths	223

Source: Davis GL, Albright JE, Cook S, Rosenberg D. Projecting the future healthcare burden from hepatitis C in the United States. *Hepatology*. 1998;28:390A.

Prevention of Disease Progression With Effective Treatment

There is strong evidence that effective treatment alters the natural history of hepatitis C, preventing progression to advanced liver disease, particularly in patients who achieve a sustained virologic response. For example, Sobesky et al⁵ studied the impact of HCV treatment on fibrosis progression in 287 patients (185 treated and 102 control) with paired biopsy specimens. Their data support the conclusion that interferon treatment stops or reduces the natural fibrosis progression rate in patients with chronic HCV infection.

The median fibrosis progression rate decreased from 0.103 F METAVIR U/y before treatment to 0.000 U/y after treatment. The effect on fibrosis was independent of genotype and whether the patient had an initial alanine aminotransferase response to treatment. Although the benefit was greatest in individuals who had achieved a sustained response following treatment, individuals who did not achieve a response also benefited from treatment, although to a lesser extent.

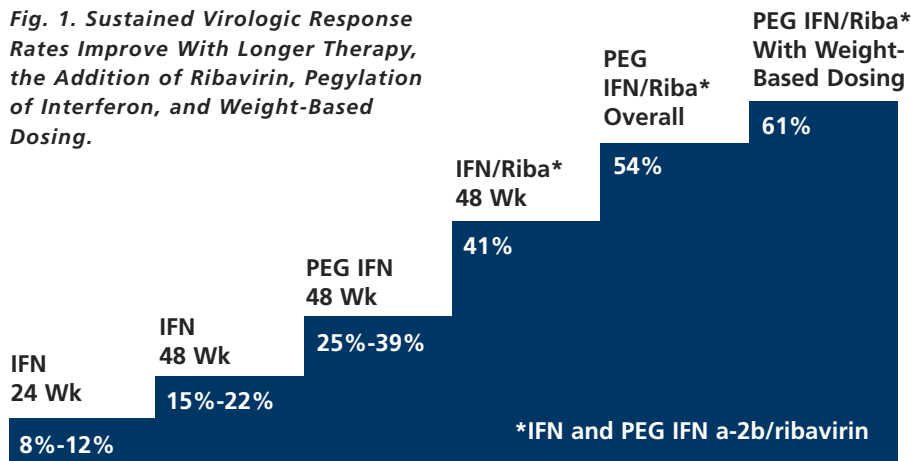
Hepatologists generally agree that patients with moderate hepatitis, cirrhosis, or bridging fibrosis should be treated due to the likelihood of continued progression. There is less agreement, however, about the necessity of treating patients with mild

ng Treatment for Patients with HCV Infection

histologic findings. Because only some of these patients will progress to cirrhosis, and only after many years, hepatologists often choose only to monitor them with periodic liver biopsies (ie, “watchful waiting”). This strategy is unsatisfactory for several reasons: (1) a large proportion of patients do not comply with the follow-up liver biopsy schedule; (2) the liver biopsy procedure itself has associated morbidity and mortality; (3) some individuals progress in the time periods between biopsies; (4) later treatment, if needed, to achieve loss of viremia occurs when the patient is older and less likely to respond; (5) future costs of long-term repeated biopsies and potential complications due to progression are significant; and (6) quality-of-life impairment is associated with any degree of viremia.⁶

Wong and Koff⁸ demonstrated that even patients with mild disease benefit from immediate antiviral treatment. Using data from a study population of patients with mild liver inflammation, they compared the risks and benefits of no antiviral therapy, periodic liver biopsy with subsequent antiviral therapy (interferon/ribavirin) if needed for progression, and immediate antiviral therapy with interferon/ribavirin. A Markov simulation model was used to estimate the long-term prognosis of patient cohorts for each treatment strategy. Study results demonstrated that patients with mild hepatitis who receive immediate antiviral therapy have a 16 percent likelihood of cirrhosis, compared with 18 percent for those with periodic liver biopsy and antiviral therapy if needed, and 27 percent for those with no antiviral treatment. Immediate therapy would cost \$5,100 less than the estimated lifetime biopsy cost of \$6,200, when savings associated with prevention of future HCV-related morbidity are considered. In addition, immediate

Fig. 1. Sustained Virologic Response Rates Improve With Longer Therapy, the Addition of Ribavirin, Pegylation of Interferon, and Weight-Based Dosing.



therapy should increase life expectancy by 1.0 quality-adjusted life-year compared with biopsy management.⁶ The study concluded that for histologically mild chronic HCV infection, immediate antiviral therapy using interferon/ribavirin reduces the future risk for cirrhosis, prolongs life, and is cost-effective.

Evolution of Treatment Toward the Next Standard of Care

The first study of interferon for treatment of HCV infection, then known only as hepatitis non-A non-B, was conducted in 1986.⁷ Interferon was found in that pilot study and in subsequent clinical trials to be able to induce a sustained response, but in only a few patients: 8 percent to 12 percent with 24 weeks of therapy, or 15 percent to 22 percent with 48 weeks of therapy.⁸⁻¹² Response rates increased to 41 percent with interferon alfa-2b/ribavirin for 48 weeks.^{9,10} (See Fig. 1.)

With the introduction of pegylated interferons, the therapeutic armamentarium for chronic HCV infection expands further. Reported sustained response rates to monotherapy with pegylated interferons have ranged from 25 percent to 39 percent,^{13,14} suggesting

that monotherapy is not likely to be a clinically significant improvement over standard interferon/ribavirin combination therapy. However, as will be discussed in detail by Dr. McHutchison in “Defining the Next Standard of Care,” peginterferon alfa-2b/ribavirin induces an overall sustained response rate of 54 percent in treatment-naive patients, a rate that increases to 61 percent when the doses of both components of combination therapy are optimized by taking into account the individual’s body weight (1.5 µg/kg peginterferon alfa-2b plus >10.6 mg/kg ribavirin).¹⁵ (See Fig. 1.) Moreover, new evidence suggests that it may be possible to increase the probability of sustained response even further by promoting adherence to recommended doses and durations of therapy. Throughout this monograph, the basis for peginterferon/ribavirin will be examined in an effort to help physicians better understand how to use and customize these new treatments and therapeutic strategies to achieve optimal outcomes.

References

- Centers for Disease Control and Prevention. Recommendations for prevention and control of hepatitis C virus (HCV) infection and HCV-related chronic disease. *MMWR*. 1998;47(No. RR-19):1-40.

Eugene R. Schiff, MD
 Professor of Medicine
 Chief, Division of Hepatology
 Director, Center for Liver Diseases
 University of Miami School of Medicine
 Miami, Florida

2. Di Bisceglie AM. Natural history of hepatitis C: its impact on clinical management. *Hepatology*. 2000;31:1014-1018.
3. Dulworth S, Patel S, Pyenson BS. The Hepatitis C Epidemic: Looking at the Tip of the Iceberg. Milliman & Robertson, Inc; 2000.
4. Davis GL, Albright JE, Cook S, Rosenberg D. Projecting the future healthcare burden from hepatitis C in the United States. *Hepatology*. 1998;28:390A.
5. Sobesky R, Mathurin P, Charlotte F, et al. Modeling the impact of interferon alpha treatment on liver fibrosis progression in chronic hepatitis C: a dynamic view. *Gastroenterology*. 1999;116:378-386.
6. Wong JB, Koff RS. Watchful waiting with periodic liver biopsy versus immediate empirical therapy for histologically mild chronic hepatitis C. *Ann Intern Med*. 2000;133:665-675.
7. Hoofnagle JH, Mullen KD, Jones DB, et al. Treatment of chronic non-A, non-B hepatitis with recombinant human alpha interferon: a preliminary report. *N Engl J Med*. 1986;315:1575-1578.
8. Keeffe EB, Hollinger FB and the Consensus Interferon Study Group. Therapy of hepatitis C: consensus interferon trials. *Hepatology*. 1997;26 (suppl 1):1015-1075.
9. Poynard T, Marcellin P, Lee SS, et al. Randomised trial of interferon alpha 2b plus ribavirin for 48 weeks or for 24 weeks versus interferon alpha 2b plus placebo for 48 weeks for treatment of chronic infection with hepatitis C virus. International Hepatitis Interventional Therapy Group. *Lancet*. 1998;352:1426-1432.
10. McHutchison JG, Gordon SC, Schiff ER, et al. Interferon alpha-2b alone or in combination with ribavirin as initial treatment for chronic hepatitis C. *N Engl J Med*. 1998;339:1485-1492.
11. Reichard O, Norkrans G, Frydén A, Braconier J-H, Sönnnerborg A, Weiland O, for the Swedish Study Group. Randomised, double-blind, placebo-controlled trial of interferon a-2b with and without ribavirin for chronic hepatitis C. *Lancet*. 1998;351:83-87.
12. Zeuzem S, Teuber G, Naumann U, et al. Randomized, double-blind, placebo-controlled trial of interferon alfa2a with and without amantadine as initial treatment for chronic hepatitis C. *Hepatology*. 2000;32:835-841.
13. Zeuzem S, Feinman SV, Rasenack J, et al. Peginterferon alfa-2a in patients with chronic hepatitis C. *N Engl J Med*. 2000;343:1666-1672.
14. Trepo C, Lindsay K, Niederau C, et al. Pegylated interferon alfa-2b (PEG-INTRON) monotherapy is superior to interferon alfa-2b (INTRON A) for the treatment of chronic hepatitis C [abstract G52/07]. *J Hepatol*. 2000;32(suppl 2):29.
15. Manns MP, McHutchison JG, Gordon S, et al. Peginterferon alfa-2b plus ribavirin compared to interferon alfa-2b plus ribavirin for the treatment of chronic hepatitis C: 24-week treatment analysis of a multicenter, multinational phase III randomized controlled trial [abstract 552]. *Hepatology*. 2000;32:297A.

Reprinted with permission of *Projects In Knowledge*, publisher of this introduction and monograph. *Projects In Knowledge* is an ACCME- and ACPE-accredited provider of award-winning continuing medical education activities created by medical educators and designers in electronic, print, live, computer, and dimensional communications. For additional information, contact Hannah Villanueva, MD at jhvillanueva@projectsinknowledge.com.

DIRECTORY OF ROSE® STAFF

Dan Abramowski
 Second Vice President-
 Claims and Client Services
daniel.abramowski@reliastar.com

Karen Kelly
 Senior Health Services
 Consultant
karen.kelly@reliastar.com

Kathy Amlaw
 Health Services Consultant
kathleen.amlaw@reliastar.com

Becky Lueders
 PPO Repricing Coordinator
rebecca.lueders@reliastar.com

Julaine Crossman
 Health Services Consultant
julaine.crossman@reliastar.com

Nan Marjama
 Administrative Assistant
nancy.marjama@reliastar.com

Mary Kay Gilbert
 Health Services Consultant
marykay.gilbert@reliastar.com

Kathy Thiesen
 Health Services Consultant
kathleen.thiesen@reliastar.com

Jane Johnson
 Director, Medical Management
jane.johnson@reliastar.com

PHONE 800-767-3509

ROSE®

ING Re is pleased to announce the addition of Kathy Amlaw, Mary Kay Gilbert and Becky Lueders to the ROSE staff.



Becky Lueders is the PPO Repricing Coordinator. She has extensive data entry and administrative experience.



Kathy Amlaw is a Health Services Consultant. She has extensive case management experience specifically in assisting patients with complex medical needs and hospice/home care.



Mary Kay Gilbert is a Health Services Consultant. She has more than 14 years of perinatal experience working within the acute and clinical settings as well as high-risk home care.

REACTIONS TO TRAUMA

Continued from page 1

tration, irritability, increased vigilance, and being startled easily. Fortunately, there are treatments available, including medication and therapy, which can greatly reduce the symptoms and global impairment that are common with this diagnosis.

Early intervention, including timely identification and treatment, is important for recovery. Research indicates that intervention within 48 to 72 hours of a trauma may greatly reduce the likelihood of PTSD. Individuals who receive appropriate intervention early after the trauma are most likely to recover quickly and have lower overall medical costs. It may be useful for health plans to prioritize referrals to mental health professionals for individuals experiencing symptoms of PTSD. These individuals should not be on a long waiting list for treatment. If a face-to-face session cannot occur within one week, then telephone intervention may help prevent crises in individuals awaiting treatment.

As a health plan or group, you could be at risk for mental health costs as a result of PTSD. Developing a flagging system would be a proactive approach to determining your risk or to anticipating potential claim activity. DSM-IV codes could be used to trigger the flags where your case management claims staff would intervene early and make an appropriate referral.

Many factors affect how individuals respond to trauma. Some individuals have a higher capacity to tolerate trauma, while others seem to have a lower psychological immunity to these events. Although each case can vary dramatically in presentation or onset of symptoms, the following four factors may help predict outcomes:

Intensity

Individuals who are exposed to severe trauma are likely to have more intense symptoms than those who have witnessed less severe events. For example, individuals who were at the site of the World Trade Center during the September 11 attacks would be expected to be more negatively affected than nearby residents who witnessed the Pennsylvania plane crash later that same morning.

Duration

Individuals who experience repeated exposures to trauma (recurring abuse, multiple attacks, etc.) are expected to be affected more negatively than those who have witnessed one event.

Proximity

Individuals who are closer to a traumatic event (located at Ground Zero versus several blocks away) are expected to have more significant symptoms.

History

Individuals who have experienced personal trauma prior to September 11, 2001, are at higher risk for having more negative symptoms than someone who has never experienced a trauma before.

Individuals seeking medical assistance in response to traumatic events generally seek treatment for sleep deprivation and a general irritability. A primary care physician (PCP) can competently prescribe medications to relieve those symptoms, which should significantly improve an individual's ability to maintain a normal daily routine. This medication management may include Trazodone, Ambien, or Sonata to induce normal sleep patterns and anti-anxiety and antidepressant medications, such as Paxil, Zoloft, and Celexa to alleviate depressed mood, overwhelming anxiety, decrease irritability, and assist

with better concentration. Most individuals will return to full function over a period of weeks with the appropriate medications to alleviate their symptoms. However, if an individual does not show significant improvement of symptoms after two or three months, the individual should be referred to a psychiatrist.

In addition to medication management, appropriate psychotherapy by a qualified psychologist or therapist can be the critical variable in assisting an individual's return to pre-trauma functioning. Simply having an individual attend psychotherapy is not enough. Duration of therapy, frequency of visits, and success of therapy can vary quite dramatically. Most individuals should show significant improvement in symptoms and return to their prior level of functioning within three months of psychotherapy treatment. If an individual does not show significant improvement in five or six sessions, a consultation between the treating psychiatrist and the therapist should occur to review the overall treatment plan, including medication and therapy strategies.

Three therapies that have been found to be particularly helpful in the treatment of PTSD are:

Exposure-based treatment.

Individuals are exposed to stimuli related to the traumatic event. For example, if an individual was in the World Trade Center and managed to escape, and now has a fear of returning to tall buildings, the therapist would engage in a step-by-step fashion to expose the individual to tall buildings. This approach would aid in the restoration of the patient's confidence to function in that environment.

REACTIONS TO TRAUMA

Continued from page 5

Cognitive behavioral therapy

This treatment challenges the patient's irrational thoughts in order to move the patient to a more functional lifestyle. For example, an individual may have an unmanageable fear of flying in airplanes. The therapist uses a directive but supportive process to reintegrate prior beliefs that flying is a safe and practical mode of transportation.

Eye movement desensitization response (EMDR)

In this treatment, the specially trained therapist uses hypnosis-related techniques to help the individual process the traumatic events so they are no longer emotionally volatile and overwhelming. This process involves retelling of the story in a comfortable setting where they have a decreased awareness of focus.

For some individuals, hospitalization may be warranted. A hospitalization usually will occur due to significant changes in basic areas of functioning such as sleeping, eating, energy, poor concentration, or suicidal thoughts. When these basic areas of functioning are impaired, the individual is at risk for on-the-job injuries, strained relations with family and/or coworkers, and a significant decline in productivity. The focus of inpatient hospitalization will typically be on returning the above noted areas to normal. Hospital stays are typically brief. Most

will last three to five days and be symptom-focused, unless there are other mental health factors that affect progress.

Events as dramatic as those witnessed on September 11 result in a range of normal symptoms that only become a mental health disorder when symptoms are particularly intense and last more than a few weeks. PTSD, by nature, is rare, because most people are never exposed to events as traumatic as the September 11 attacks. We all have individual strengths and weaknesses that can affect our functioning after trauma. Having a basic understanding of common reactions and treatment strategies can be very useful in directing others to appropriate and efficient care. 🐾

Tim Lang, PsyD is a consulting psychologist with Behavioral Management, Inc. He is a former U.S. Army Psychologist, and spent a tour of duty in Bosnia, where he assessed and treated numerous soldiers for PTSD and Acute Stress Syndrome.

Mark Raderstorf, M.A., CRC, CCM is a licensed psychologist and president of Behavioral Management, Inc. a behavioral health management firm in Minneapolis. BMI serves as a consultant to ING Re and its customers; services include benefit plan structuring, protocol development, external case review, and training.

Mark your calendar for the Eighteenth Annual ROSE® Seminar July 28 – 30, 2002

Provider Repricing

The ROSE® Program provides you with access to a variety of resources with a proven history of successful control of claim costs.

These resources offer added financial protection when an insured seeks health care outside of your provider network. In many cases, substantial savings have occurred. It is not unusual to reach as much as a 40 percent reduction of billed charges.

Out-of-area admissions can be very costly and problematic. These cases can also be difficult to manage. Our resources can assist you in repricing claims before you pay the bill. The majority of repricing can be completed in-house at ING Re by our dedicated PPO repricing coordinator, Becky Lueders.

Discounts are available through our list of broad national networks for acute and non-acute care facilities, outpatient services, diagnostic testing, various ancillary services, and providers. These networks have been selected for their contracted rates and customer service. It is our goal to offer our clients cost control in these situations, on a case-by-case basis. Repricing fees are based on a percentage of savings. If there are no savings there is no fee.

Contact your ROSE health services consultant for assistance to access these services. 🐾

ROSE RESOURCE

The purpose of the **ROSE Resource** newsletter is to provide clients of ING Re with information on a wide variety of topics related to catastrophic medical case management. Case histories, facility highlights and similar articles are intended to serve a general information purpose and do not constitute endorsements

of facilities, programs or persons by ING Re. The information contained in the articles represents the opinion of the authors and does not necessarily imply or represent the position of the editors or ING Re. Articles are not intended to provide legal, consulting or any other form of advice. Any legal or other questions you

have regarding your business should be referred to your attorney or other appropriate advisor.

© 2001, ING America Insurance Holdings. All rights reserved. No portion of this publication may be reproduced without permission from the publisher.